



Matra Government to Government (Matra G2G) 2025-2029

Annex I - Project plan

1. General project information

Project title: Cross-Border Democracy and Good Governance Exchange Project – Moldova and The Netherlands (GEO CODEX)

Project country, including the project's region/location

Country: Moldova

Project Purpose

To strengthen Moldova's democratic society and rule of law by enhancing the capacity of public institutions to implement transparent, evidence-based governance through improved geospatial data management, legal compliance with EU standards, and increased civil engagement, utilising Dutch expertise. The project aims to advance transparent governance, evidence-based policymaking, and civic engagement, benefiting both the government and the citizens of Moldova by improving public services and addressing societal challenges.

Project's Primary Outcomes:

- Legal and institutional frameworks to support cross-border and in-country cooperation in spatial data infrastructure are improved, enhancing Moldova's democratic society, rule of law, as well as responsible and transparent governance.
- Accessibility, harmonisation and standardisation of Spatial Data through legal compliance with EU Standards is accelerated, enhancing evidence-based governance and public sector efficiency.
- User engagement and cross-sector utilisation of spatial data is promoted, increasing civic engagement and supporting democratic governance.

This will result in more transparent governance, stronger in-country and cross-border collaborations, and tangible benefits to citizens through improved access to public services.

Project Summary

The GEO CODEX (Cross-Border Democracy and Good Governance Exchange – Moldova and The Netherlands) project, led by The Hague Academy for Local Governance (THA) and the University of Twente's Faculty of Geo-Information Science and Earth Observation (ITC), in collaboration with the Netherlands' Cadastre (Kadaster) and the Moldovan Agency for Geodesy, Cartography, and Cadastre (AGCC), aims to promote regional cooperation between Moldova and the Netherlands. By enhancing Moldova's National Spatial Data Infrastructure (NSDI), the project will strengthen the country's legal and institutional alignment with the EU INSPIRE directive. This alignment is a crucial step toward Moldova's potential EU integration and supports compliance with other EU policies and regulations, such as the Data Governance Act, the Interoperability Europe Act, and the Open Data Directive. This will be realized through various activities, including study visits, workshops, and in-country and cross-border collaboration frameworks, focusing on the following objectives:

- **Promote data sharing and interoperability** between government entities and other sectors.
- **Facilitate in-country and cross-border collaboration** to tackle regional challenges and share best practices in geospatial data usage.
- **Ensure legal compliance** with EU standards, particularly INSPIRE, its Data Governance Act, the Interoperability Europe Act and the EU's Open Data Directive, to enhance Moldova's integration prospects.
- **Support evidence-based policymaking** by utilising geospatial data for improved governance.
- **Enhance transparency** and civic engagement by making geospatial data accessible to citizens and businesses.

Through capacity-building efforts, involving government officials, academia, and civil society representatives, and incorporating Dutch expertise and experience, the project will create a solid foundation for better governance and public service delivery. The legal compliance and institutional improvements achieved through this project will bring significant benefits to Moldovan citizens, addressing pressing environmental and societal issues while promoting transparency and accountability in public administration.

Involvement in other Matra 2025-2029 proposals

The Hague Academy for Local Governance is involved in:

- Albania - Towards democratic local governance: Albania and the Netherlands (Quick scan number QSAL15)
- Ukraine - Towards Integrity in the Civil Service in Ukraine (Quick scan number QSMC21)

ITC and Kadaster are involved in:

- Bosnia & Herzegovina - GeoConnect – Connecting Geospatial Expertise for Responsible Governance (Quick scan number QSBA06)
- Georgia – EgtoGo - Enhancing Georgian Topographic Governance (Quick scan number QSGE10)

2. Contextual, problem and stakeholder analysis

2.1 Context and problem analysis

Geographic or spatial data is critical for understanding and managing the environments where people live, work, and interact. By linking datasets—such as weather, traffic, and health statistics—to specific locations, spatial data offers insight into current issues, root causes, and emerging risks, enabling evidence-based responses. Accessible and transparent spatial data supports effective decision-making, allowing governments to address challenges like natural hazards, environmental stress, and public health in a data-driven manner. This data-driven approach benefits citizens by improving quality of life, reducing crime, and fostering economic growth through transparent, efficient governance.

In Moldova, these benefits are increasingly important as the country needs to strengthen its geospatial data governance to support EU integration, aligning with the EU's INSPIRE directive to promote data accessibility, interoperability, and transparency. The GEO CODEX project will assist the Moldovan public sector and affiliated stakeholders in achieving these goals. The project originated from a collaborative effort by a group of experts from Moldova and the Netherlands who had previously engaged in initiatives focused on the implementation of the INSPIRE Directive and the development of Moldova's National Spatial Data Infrastructure (NSDI). Building on their earlier experiences, the experts recognised the need to extend beyond the technical and legislative achievements to date. They saw an opportunity to deepen the impact by enhancing civic engagement and fostering closer collaboration with key stakeholders, including academic institutions and the private sector.

This broader, multi-stakeholder approach is essential for aligning Moldova's geospatial infrastructure with other relevant EU regulations and policies, such as the Data Governance Act, Interoperability Europe Act, and the Open Data Directive. Their vision is to embed the Moldovan NSDI into the daily lives of citizens, ensuring that geospatial data becomes an integral tool for both the public and private sectors, as well as for civil society. By enhancing the accessibility and usability of high-quality geospatial information that meets European standards, the project aims to empower government agencies and citizens alike to make informed decisions, thereby strengthening the rule of law and promoting good governance.

The project developed into a Quick Scan following a comprehensive review of existing policies, strategic goals of local organisations, and previous initiatives. This initial assessment helped identify key gaps and opportunities for further development, laying the groundwork for a focused and impactful project strategy. The Agency for Geodesy, Cartography, and Cadastre (AGCC), a central player in Moldova's geospatial sector, together with international partners from the Netherlands, played a pivotal role in shaping the project's objectives to ensure it aligns with Moldova's strategic goals for EU integration and modernisation of its geospatial capabilities.

The legal, Institutional and Organisational framework

In Moldova, the fields of geodesy, cartography, and cadastre are undergoing significant modernisation, driven by legal and institutional reforms aimed at improving the efficiency and accuracy of spatial data management. These reforms are shaped by a framework of laws, government decisions, policies, and regulations that govern the country's approach to geospatial information and real estate registration. These include:

- The Law on Geodesy, Cartography, and Geoinformatics (Law No. 778/2001) which serves as the foundation for activities in these areas. It outlines the responsibilities of national agencies in establishing and maintaining geodetic networks, producing maps, and managing geographic information systems (GIS).
- The Law on Real Estate Cadastre (No. 1543/1998) which regulates the system of real estate registration, positioning cadastre as a critical tool for property rights protection, land management, and urban planning. It assigns responsibilities for recording cadastral data and fostering the development of the real estate market.
- The Governmental Decision No. 959/2023 which establishes the mandate of the newly created Agency for Geodesy, Cartography, and Cadastre (AGCC). This decision defines the AGCC's role in drafting policy documents, managing national geodetic and cadastral networks, and coordinating spatial data infrastructure (SDI) initiatives.
- The Law on the National Spatial Data Infrastructure (NSDI) (No. 254/2016) which mandates the development and integration of Moldova's NSDI, aligning it with EU standards, particularly the INSPIRE directive. This law aims to ensure that spatial data is interoperable and accessible to both public and private stakeholders, enhancing decision-making across multiple sectors.

To further support these advancements, it is essential to establish an appropriate legal framework that meets Moldova's needs. This should include regulations to promote the availability of spatial data (such as the INSPIRE, Open Data, and Access directives/acts), as well as measures to limit access to certain data types (addressing privacy, data protection, intellectual property rights, national security, and liability). Additionally, it is important to incorporate competition regulations, cooperation arrangements, and ethical guidelines into this framework.

The modernisation of geodesy, cartography, and cadastre in Moldova has been propelled by a combination of legal reforms and institutional restructuring under the broader framework of administrative, organisational, and operational reforms. Key developments include:

- Establishment of the AGCC: The creation of the Agency for Geodesy, Cartography, and Cadastre (AGCC) was aimed at streamlining geospatial management. The AGCC is responsible for coordinating national policies in these sectors and overseeing subordinate public institutions tasked with delivering services. This agency effectively bridges the gap between policy development and operational services, such as map production and real estate cadastre maintenance.
- Institutional Consolidation: The merger of various departments into the AGCC, along with a clearer division of roles between policy-making and service delivery, has significantly improved efficiency in mapping and cadastral activities. Two subordinate institutions are now dedicated to providing services and products, while the AGCC focuses on policy and strategic oversight.

- **Digital Platforms and Geoportals:** Recent reforms have emphasised the digitisation of cadastral and geospatial services. Initiatives to develop and maintain digital platforms and geoportals, such as the NSDI Geoportal, play a crucial role in ensuring that spatial data is regularly updated, easily accessible, and interoperable across sectors, supporting better decision-making and transparency.

The modernisation of Moldova's geospatial sector is largely driven by active collaboration among various stakeholders, including government ministries, local authorities, academia, private sector actors, and international partners. These stakeholders play a critical role in the development and maintenance of the National Spatial Data Infrastructure (NSDI) and its related infrastructure.

Public Sector Involvement is a priority for the AGCC, as several ministries rely on accurate spatial data for essential functions. For example, the Ministry of Agriculture and Food Industry uses this data for land use planning, the Ministry of Environment for environmental protection, and the Ministry of Infrastructure and Regional Development for infrastructure projects. Their need for precise, up-to-date information underscores the importance of robust geospatial systems.

Private Sector and Civil Society are also key contributors to the AGCC's work. Real estate developers, infrastructure companies, and environmental NGOs are major users of cadastral and spatial data. Their demand for reliable information supports the ongoing efforts to modernize these systems, as accurate data is essential for their operations.

International Cooperation has further propelled Moldova's geospatial modernisation. Collaboration with global organisations such as the World Bank and European Union, along with memberships in bodies like EUPOS, EuroGeographics, Space4Geo, and the International Federation of Surveyors, has helped Moldova align with international geodetic standards. These partnerships also bring in best practices for spatial data management, ensuring Moldova remains competitive and compliant with global standards.

The Agency for Geodesy, Cartography and Cadastre (AGCC) is the central administrative authority responsible for implementing state policies in the following fields: geodesy, cartography, geoinformatics, remote sensing, spatial data infrastructure, real estate cadastre and valuation. AGCC, on behalf of the state, acts as the founder of the Public Institution of Real Estate Cadastre and the State Enterprise Institute of Geodesy, Technical Prospecting, and Cadastre "Ingeocad". The mission of the Agency is to develop public policies and specific regulations in its fields of competence, namely: geodesy, cartography, geoinformatics, and remote sensing; spatial data infrastructure; real estate cadastre and valuation. AGCC monitors the quality of policies and regulatory acts by adjusting them to European standards and norms. Additionally, the Agency proposes justified state interventions to provide efficient solutions in its assigned fields of competence.

Problem Analysis

Moldova's geospatial and cadastral systems face significant challenges, including outdated infrastructure, fragmented spatial data management, and a lack of public participation in governance. These problems limit the efficiency and effectiveness of land management services and hinder the further development of a National Spatial Data Infrastructure (NSDI). The primary root causes of these issues are the reliance on obsolete technologies that do not meet current geospatial standards, inadequate coordination between government agencies responsible for managing spatial data, and the absence of mechanisms to engage citizens and civil society in governance processes.

These issues have broad consequences for Moldova's governance and economic development. Outdated geospatial infrastructure makes it difficult to provide accurate and timely data, which is essential for land administration, urban planning, and infrastructure development. Government agencies, businesses, landowners, and investors are all affected by delays and inefficiencies in real estate transactions, project planning, and environmental monitoring. Furthermore, the lack of integration between different agencies' spatial data systems hampers the country's ability to streamline governance processes and adopt European best practices, such as those outlined in the EU's INSPIRE Directive, which promotes the sharing and standardisation of spatial information across borders.

Another significant consequence is the erosion of public trust in government institutions due to limited transparency and civic participation in spatial data governance. Without access to accurate and user-friendly geospatial platforms, civil society, businesses, and individuals are unable to fully engage in decision-making processes that affect land use, property rights, and local development. The lack of

public awareness regarding the importance of geospatial data contributes to a reduced level of civic engagement in Moldova, further weakening the relationship between citizens and the government.

To address these interconnected issues, the proposed project targets key areas within Moldova's geospatial sector, focusing on the institutional strengthening of the Agency for Geodesy, Cartography, and Cadastre (AGCC). The project aims to modernise outdated geospatial systems by upgrading technological infrastructure, improving the capacity of staff, and enhancing data governance mechanisms. By fostering better coordination between agencies responsible for spatial data, the project will help streamline the management of geospatial services, which is critical for improving land administration, economic planning, and environmental monitoring.

An integral component of the project is the development of public participation mechanisms. Civic engagement will be fostered through public awareness campaigns, the publication of user-friendly guidelines, and the creation of accessible geoportals. These initiatives aim to empower citizens, civil society, and the private sector by providing them with the tools and information needed to engage with geospatial data. By making geospatial information more accessible, the project helps to build trust between the public and government institutions, promoting more inclusive and transparent governance.

While the project aims to address the technological and capacity-building aspects of the AGCC and its partners, it may not fully address the issue of fragmented data governance across all public institutions. Coordination between agencies outside the AGCC's direct remit, such as other ministries or local governments, may not be fully resolved within the scope of this project. Furthermore, broader issues related to public participation and civic engagement, while being an intrinsic part of the project's goals, may need long-term structural reforms beyond what can be achieved within this specific intervention. These challenges might require complementary governance reforms and policies to be implemented over time.

Gender Equality and Inclusion

The GEO CODEX project is designed to address inclusion and gender equality by promoting equal access to geospatial data and services. Gender disparities in land ownership and property rights are recognized as significant issues in Moldova, and by improving transparency and accessibility in cadastral services, the project aims to reduce gender-based barriers to property registration and land management. The project's emphasis on public engagement ensures that marginalised groups, particularly women, have greater access to the tools and data needed for property rights protection. The training programs will also promote the inclusion of women in technical and policy-making roles within AGCC and related institutions. Gender and inclusion considerations are woven into the project's civic engagement strategy, and specific training modules will address the gender dimension of spatial data governance. Gender-disaggregated data will be collected to monitor the project's impact on women's access to land and property rights.

2.2 Target groups / local beneficiaries

Direct Beneficiaries

The Agency for Geodesy, Cartography, and Cadastre (AGCC) is the central authority responsible for implementing state policy in geodesy, cartography, geoinformatics, spatial data infrastructure (SDI), real estate cadastre, and real estate valuation in Moldova. AGCC's responsibilities include developing policies and normative acts in these fields, maintaining national geodetic networks and topographic databases, and ensuring compliance with state regulations in geospatial disciplines. AGCC also coordinates projects related to geographic information systems (GIS), manages spatial data dissemination through specialised web portals, and oversees the creation of state registers for geographic and cadastral data. In the field of real estate cadastre, the AGCC coordinates data collection, maintains cadastral databases, and oversees property valuation practices. AGCC's structure includes two key implementing agencies: the Public Institution Real Estate Cadastre with 915 employees, responsible for the cadastral system, and the State Enterprise INGEOCAD, which has 53 employees managing geodetic and cartographic work. AGCC itself has a staff of 46 civil servants who manage policy, regulation, and oversight. Together, these entities ensure that Moldova's geospatial and real estate data are accurate, up-to-date, and accessible to support governance, public service, and infrastructure development.

The project directly contributes to improving the institutional capacity of AGCC, Public Institution Real Estate Cadastre, and State Enterprise INGEOCAD by addressing key challenges they face in managing and delivering geospatial and cadastral services. These organisations are responsible for maintaining critical national data infrastructure, such as geodetic networks, real estate cadastre

systems, and geographic information systems (GIS), which are essential for effective land management, urban planning, and public services. This project strengthens their institutional capacity by providing technical assistance, policy development, and digitalisation of services, which are necessary for modernizing their operations. For example, updating their geospatial databases and enhancing spatial data infrastructure (SDI) improves their ability to manage large-scale geographic data and increases interoperability between various public entities. Furthermore, the project offers training to staff, enhancing their technical expertise in managing advanced geospatial technologies like remote sensing, photogrammetry, and satellite imagery.

AGCC and its associated agencies are the logical direct beneficiaries of this project, as they are directly responsible for geospatial data management and cadastral services. Inefficiencies within these systems—stemming from outdated technologies and limited data integration capacity—pose significant barriers to effective governance and decision-making. By focusing on AGCC and its partner institutions, the project addresses these core challenges, aiming to strengthen their technical and operational capacities to fulfil their mandates more efficiently and improve public services. This progress will, in turn, benefit a broader range of public institutions by establishing a more robust geospatial data governance framework that will be shared across sectors.

AGCC, as the central representative of (semi-)public entities in geospatial data management, has shown strong support for the project's implementation. Additionally, in the World Bank Moldova project (March 2024), an industry needs assessment survey highlighted this commitment, with substantial engagement from public institutions (22 responses), the private sector (11 responses), and academia (1 response). This robust participation underscores the dedication of public institutions to advancing sector development and driving continuous improvement.

As part of their commitment to the project, AGCC will lead and coordinate the core stakeholder group, comprising representatives from all key stakeholders, to provide support and guidance throughout the project's implementation. If necessary, input from additional secondary stakeholders can be gathered through this core group, ensuring a comprehensive approach to improving geospatial data governance.

AGCC will also support the organisation of all training sessions, workshops, and meetings in Moldova, providing logistical support, training facilities (such as rooms and ICT resources), and playing an active role at the content level by facilitating expert involvement, ensure training materials are relevant to Moldovan needs and contexts, and providing access to essential data and documentation. Additionally, AGCC will supply timely feedback on project data and progress, helping to align activities with local priorities and contributing to impactful outcomes. Finally, AGCC will ensure the availability of experienced and skilled staff to support execution and monitoring, as well as to appoint a local project coordinator/contact point for the duration of the project.

Indirect Beneficiaries

Indirect beneficiaries of the project include **citizens** who gain from improved access to transparent and reliable public services in areas like land management, urban planning, and disaster response, enhancing both quality of life and safety. **Public institutions and local authorities** benefit from better data management and interoperability, enabling more accurate, efficient, and transparent decision-making across sectors such as infrastructure, agriculture, and environmental protection. The **private sector**, particularly real estate developers, also stand to gain from updated geospatial data, reducing project delays and supporting well-informed investments. **Civil society organisations** (CSOs) and NGOs will have improved access to geospatial data, aiding advocacy, public awareness, and engagement efforts related to environmental conservation, urban development, and public health. Additionally, **academic and research institutions** benefit from access to standardised, high-quality data that supports evidence-based research and innovation, informing policy recommendations. Finally, **international partners and regional neighbours** benefit from Moldova's alignment with EU data governance standards, facilitating cross-border cooperation and enabling collaborative approaches to regional environmental and socio-economic challenges. Together, these beneficiaries contribute to fostering a more transparent, participatory, and effective governance environment that aligns Moldova with European institutional frameworks.

2.3 Stakeholder analysis

Stakeholder	Role ¹⁾	Interest ²⁾	Position ³⁾	Influence ⁴⁾
Ministry of Defence	decision-maker	medium	in favour	medium
Ministry of Environment	decision-maker	high	in favour	high
Ministry of Internal Affairs	decision-maker	medium	in favour	medium
S.E. Road Administration	other (semi-government organisation)	high	in favour	high
Agency "Moldsilva"- Forest Research and Development	other (semi-)government organisation	high	in favour	high
Hydro meteorological State Service	other (semi-)government organisation	high	in favour	high
General Inspectorate for Emergency Situations	other (semi-)government organisation	high	in favour	high
National Bureau of Statistics	other (semi-)government organisation	high	in favour	high
Technical University of Moldova	academia	high	in favour	high
Producers of spatial data (UGM)	civil society organisation	high	in favour	high

The Ministry of Environment is instrumental in shaping and implementing policies related to sustainable development and environmental protection, ensuring alignment with national and international regulations, particularly the INSPIRE Directive. Its involvement in the project is driven by the interest in promoting effective cross-border cooperation and sustainable practices. The Ministry's responsibilities include overseeing environmental policies and managing relevant spatial data sets. Positioned as a key governmental authority, it is committed to upholding environmental standards, which directly align with the project's objectives. With significant influence over policy direction and resource allocation, the Ministry plays a critical role in ensuring that project activities meet regulatory requirements and support sustainable development goals.

The Technical University of Moldova (TUM) contributes essential technical expertise and innovation to the project, focusing on geospatial data, Geographic Information Systems (GIS), and sustainable development practices. TUM's interest lies in enhancing its role in scientific research and practical applications, thereby fostering advancements in the field. The university is responsible for conducting research, developing new technologies, and providing training that informs effective solutions for cross-border governance issues. As a leading academic institution, TUM is committed to promoting data-driven decision-making in governance and policy implementation. Its influence stems from its research capabilities and expertise, enabling it to shape methodologies and ensure that project outcomes are informed by the latest academic insights.

The Union of Geodesists of Moldova (UGM) brings a specialized focus on geodesy, topography, and GIS to the project, ensuring the provision of accurate geospatial data essential for effective governance and decision-making in border regions. UGM is motivated by the interest in advancing

geospatial practices and ensuring that mapping and resource allocation are handled with precision. Its responsibilities include providing technical expertise that supports the project's innovative and technical aspects. UGM's position is rooted in its commitment to high standards in geospatial data management, aligning closely with the project's goals. The organisation possesses the authority to influence project methodologies, ensuring that the technical components are executed effectively and contribute to the overall success of the project.

2.4 Involvement of local civil society organisations

The involvement of local civil society organisations (CSOs) is critical to the success and sustainability of Moldova's geodesy, cartography, and cadastre initiatives. Key partners include the **Union of Geodesy of Moldova (UGM)**, a group of 60 professionals including geodesists, cadastre engineers, cartographers, remote-sensing operators, and geo-informaticians. UGM collaborates closely with the AGCC, regularly consulting on sector progress and challenges. Acting as a bridge between the AGCC and the wider professional community, UGM gathers and conveys expert feedback, identifies technical gaps, and suggests innovations, helping AGCC adapt its strategies to current labour trends.

The Moldova Union of Surveyors, another significant CSO, brings expertise in surveying and land management, providing crucial insights into technical and regulatory challenges in real estate management. As a third-party partner, the Union of Surveyors supports real estate registration improvements through expert consultation and public feedback, ensuring alignment with both national and international best practices. **The National Association of Professional Valuers of Moldova**, with 32 real estate valuation experts, also plays a pivotal role. Their work ensures accurate, standardized property valuations and supports the project's monitoring and evaluation, helping maintain high standards in cadastral processes and regulatory compliance.

Together, these CSOs bring extensive technical knowledge, community influence, and a strong commitment to enhancing Moldova's geospatial infrastructure. By actively contributing expertise, participating in capacity-building activities, and closely aligning with the AGCC, they help ensure that Moldova's spatial data industry meets the evolving needs of the country's development goals.

2.5 Involvement of Dutch (semi-)governmental organisations

The Netherlands' Cadastre, Land Registry and Mapping Agency (Kadaster) collects and registers administrative cadastral and spatial data on property and the rights involved since 1832. By doing so, Kadaster protects legal certainty. Kadaster is also responsible for national topographic and cartographic mapping products and maintenance of the national reference coordinate system. Furthermore, Kadaster acts as an advisory body for land-use issues and national spatial data infrastructures.

Kadaster is a non-departmental, autonomous public body under the political responsibility of the Minister of Housing and Spatial Planning. A total of 2000 employees work at Kadaster and provide the mentioned services. Kadaster shares its knowledge and experiences with sister organisations and other public institutes outside the Netherlands. Kadaster has been advising foreign governmental organisations for over 30 years on more than 200 projects about system design and operationalisation for land registration and spatial data infrastructures (SDI). Kadaster is represented on the boards of, or participates on an expert level in several international organisations, such as EuroGeographics and UN-GGIM. We also share our knowledge with organisations such as the World Bank and the International Federation of Surveyors (FIG). Kadaster maintains the 'International Office of Cadastre and Land Records' (OICRF), an international documentation centre on the issue of land registration.

Kadaster has designed, developed and implemented the NSDI of the Netherlands and is responsible for operation and maintenance on a daily basis. Kadaster is also the main national provider of the Infrastructure for Spatial Information in Europe (INSPIRE). Leveraging its extensive experience and proven track record, it can make a substantial contribution to this project, as it has already demonstrated in this region and field. For example via EU Twinning project, TAIEX study visit, World Bank projects and bilateral support of Dutch embassies in Moldova for advisory missions and workshops.

As AGCC and Kadaster perform similar responsibilities in the development, maintenance and efficient use of land administration and spatial data for sustainable development in their country, Kadaster is the logical counterpart for the main beneficiary AGCC. To emphasise and strengthen this cooperation,

AGCC and Kadaster signed a Memorandum of Understanding (MoU) in March 2024. In this MoU both organisations described the topics to closely work together in the fields of geodesy, cartography, cadastre and NSDI. In this project, Kadaster combines the specific support for AGCC with the described topics of cooperation in the MoU.

ITC is the University of Twente's Faculty of Geo-Information Science and Earth Observation. In terms of role, the Faculty ITC is among the world's top ten institutes for academic education, scientific research and technology development in earth observation and geo-information. Its people are engaged worldwide in realising the United Nations Sustainable Development Goals in food security and agriculture, energy transition, geo-health, climate change adaptation, urban development and smart cities, disaster risk reduction, and land administration. It is a logical partner in this project in that it already has a strong and ongoing relationship with Kadaster, via the School for Land Administration Studies, a decades-long collaboration whereby ITC and Kadaster both support project work, scholarships (PhD and Masters), and capacity development around matters of NSDI and land administration – always with a focus on global partners, including those in East Europe and the Western Balkans. ITC supervised several Masters students from Moldova in the past period. ITC is also logical to include as the project will incorporate beneficiaries from the tertiary sector in Moldova. In terms of commitment, as a knowledge institute, ITC will play a crucial role in bringing content and expertise into the workshops, mentoring, and case study showcases. ITC will contribute staff, technical resources, and facilities (e.g., for the study visits), where needed, in various parts of the project. Additionally, ITC's technical and contextual experience will be supplemented with external expertise, including that of a full professor from the KU Leuven Public Governance Institute, who holds the chair in 'Information Management in the Public Sector' and has over 25 years of experience in international projects, including work in Moldova. Kadaster and ITC will also make use of connections with other key players in the geospatial sector in the Netherlands to enhance workshop exchanges.

A third Dutch partner in the set-up of this project is **The Hague Academy for Local Governance (THA)**. Established in 2008, this non-profit organisation dedicated to strengthening local democracy worldwide, has a particular focus on public servants and public institutions. Specializing in practice-oriented training, THA addresses a wide range of topics such as citizen participation, public service delivery, and integrity in governance. Through both open subscription courses and tailored programs, participants from various countries engage in intensive learning experiences that emphasize real-life challenges and solutions. The Academy's unique approach fosters cross-learning among government practitioners, NGOs, and development organisations, enhancing their capacity to implement meaningful change in their local contexts. Over the past 15 years, The Hague Academy has built a vast network of thousands of practitioners, particularly across Eastern Europe and the MENA region, significantly contributing to the professional development of emerging leaders in public service. THA will bring overall coordination to the project, leveraging its extensive experience in training design and civil engagement to ensure that the project's activities are effectively aligned with the needs of local stakeholders. Furthermore, THA's unique experience collaborating with both national and local public sector entities will facilitate the development of tailored training programs that address the specific governance challenges faced by these institutions

The complementarity between THA and partners like Kadaster and ITC lies in their unique strengths and expertise. Kadaster and ITC bring a wealth of technical knowledge and a robust local network in geospatial data management in Moldova, ensuring that the project benefits from advanced methodologies and technologies. In contrast, THA addresses broader governance issues that are critical for the success of the project, such as enhancing democratic governance, promoting integrity, fostering inclusive service delivery, and encouraging citizen participation.

3. Project plan

3.1 Theory of Change (ToC)

The GEO CODEX project aims to enhance Moldova's democratic governance by improving the management, accessibility, and interoperability of spatial data. By strengthening Moldova's National Spatial Data Infrastructure (NSDI), the project supports transparent governance, promotes evidence-based policymaking, and fosters civic engagement. Leveraging Dutch expertise, GEO CODEX advances Moldova's legal and operational alignment with EU standards, benefiting government institutions and citizens by enhancing public services and addressing societal and environmental issues.

Problem statement: Moldova faces critical challenges in managing spatial data due to outdated infrastructure, fragmented data governance, and limited public engagement (Section 2.1). These issues compromise the effectiveness of land administration, urban planning, and disaster response, leading to inefficiencies in government services, poor evidence-based decision making and the erosion of public trust. The EU's INSPIRE Directive and Data Governance Act highlight the importance of data accessibility, transparency, and accountability in governance, underscoring the need for Moldova to modernise its geospatial systems. The project addresses these issues by enhancing technical and institutional capacities for spatial data management in alignment with EU standards.

Pathways to Change

1. **Strengthening Legal and Institutional Frameworks (Outcome 1).** The project will establish governance structures that enhance Moldova's NSDI through in-country and cross-border data-sharing frameworks. This will be achieved by aligning Moldova's spatial data regulations with EU standards, guided by comprehensive legislative reviews and study visits to the Netherlands for knowledge exchange. Improved institutional policies will allow Moldova to enhance its governance through data-driven decision-making and transparency, supporting democratic principles and public accountability.

2. **Standardisation and Compliance with EU Standards (Outcome 2).** GEO CODEX will implement EU-compliant cartographic standards and methodologies for remote sensing data, enhancing data quality and accessibility for public use. Training sessions for Moldovan agencies will cover remote sensing interpretation and data processing, creating a skilled workforce to manage NSDI's modernisation. Compliance with EU standards in spatial data management will improve Moldova's readiness for potential EU integration, ensuring data interoperability across sectors and borders.

3. **Civic Engagement and Cross-Sector Collaboration (Outcome 3).** The project will promote public awareness and foster cross-sector collaboration by launching a civic engagement strategy and publishing accessible user guidelines. These efforts will improve the public's ability to engage with spatial data, encouraging democratic participation and transparency. Workshops and knowledge-sharing events will bring together stakeholders from government, academia, and civil society, building a foundation for continued public engagement and cooperation in governance.

Risk management: Key risks include political instability, limited local technical expertise, and competing projects that may distract from GEO CODEX's objectives (Section 3.6). To mitigate these, the project will build strong local partnerships, coordinate closely with international donors, and adapt timelines for flexibility.

Assumptions: (1) **Institutional Support:** Moldova's public institutions remain committed to the project's goals, actively adopting EU-aligned practices (2) **Sustained Capacity:** Skills and knowledge developed within AGCC will be transferred to other public institutions and institutionalised, ensuring long-term application. (3) **Stakeholder Engagement:** Civil society, public institutions, and private stakeholders collaborate actively, supporting governance changes (4) **Political Stability:** Stability will persist, allowing Moldova's governance frameworks to benefit from the project's reforms.

Communication strategy: The project's communication strategy will raise visibility and document project successes. Components include: (1) **Website:** Centralised updates on project outputs, training resources, and public engagement tools (2) **Storytelling:** Success stories will highlight the project's impact on governance and public services, showcasing EU-Moldovan collaboration (3) **Outreach Events:** Digital and public outreach events will promote the project's benefits, increasing public awareness and support for spatial data modernisation.

Long-term change: By aligning Moldova's spatial data governance with EU standards and promoting civic engagement, the project contributes to a more transparent and accountable government. The improved NSDI will support Moldova's democratic institutions and empower citizens to engage with public data, fostering a participatory and data-informed governance model that benefits all citizens.

sustainability: The project's sustainability is ensured by strengthening AGCC's institutional capacity and fostering cross-sector collaboration, which will allow Moldova's NSDI to evolve beyond the project's duration. By institutionalising Dutch-Moldovan partnerships and supporting civic engagement, the project fosters an enduring impact on Moldova's governance and public trust in government data services.

Theory of Change: Cross-Border Democracy and Good Governance Exchange Project - Moldova and The Netherlands



3.2 Project plan/approach

OVERALL OBJECTIVE is to strengthen Moldova's democratic society and rule of law by enhancing the capacity of public institutions to implement transparent, evidence-based governance through improved geospatial data management, legal compliance with EU standards, and increased civil engagement, utilising Dutch expertise.

Outcome 1: Legal and institutional frameworks to support cross-border and in-country cooperation in spatial data infrastructure are improved, enhancing Moldova's democratic society, rule of law, as well as responsible and transparent governance (Coordination: THA).

Output 1.1 Improved governance framework for in-country and cross-border cooperation

- 1.1.1. Organise an opening event to launch the project, introduce the project goals and foster collaboration between key stakeholders while ensuring high visibility for the project. This activity aims to create awareness, build partnerships, and ensure alignment between the different stakeholders.
- 1.1.2. Conduct a comprehensive analysis of current legislation in the country and cross-border cooperation in Moldova, focusing on alignment with relevant EU regulations (such as the EU INSPIRE Directive). This analysis will identify current gaps and propose areas for legislative reform
- 1.1.3. Develop a governance structure with guidelines for in-country and cross-border data sharing, focusing on harmonising legal and policy frameworks and enhancing interoperability with national stakeholders and neighbouring countries. This governance structure will provide clear guidance for the strategic task force (output 1.3.).
- 1.1.4.: Establish and ensure efficient coordination between Moldovan governmental and academic bodies, EU entities, and Dutch counterparts.

Output 1.2. Strengthened institutional capacity for legal and strategic policy formulation

- Activity 1.2.1. : Design and implement a tailored training program to enhance the skills of AGCC staff in policy formulation and strategic alignment with EU regulations on spatial data infrastructure and public administration.
- Activity 1.2.2. : Organise a study tour to the Netherlands for project-involved staff/organisations to exchange knowledge on NSDI legal frameworks and institutional best practices, focusing on enhancing Moldova's governance and rule of law.

Output 1.3. Establishment of a strategic task force for cross-border and in-country Collaboration

- 1.3.1. : Establish a strategic task force for in-country and cross-border collaboration. Develop the strategic task force to serve as the primary body for coordinating cross-border collaboration efforts in spatial data exchange and is inscribed in the governance structure established under objective 1.1.
- 1.3.2. : Create and maintain a cross-border cooperation plan, with a focus on harmonising governance, facilitating data exchange, and aligning Moldova's spatial data infrastructure with EU standards and international best practices.
- Activity 1.3.3. Organise a knowledge exchange workshop entitled "Practical applications of NSDI in in-country and cross-border collaboration" highlighting successful case studies from The Netherlands and Moldova.

Outcome 2: Accessibility, harmonisation and standardisation of Spatial Data through legal compliance with EU Standards is accelerated, enhancing evidence-based governance and public sector efficiency (Coordination: ITC).

Output 2.1 Implementation of cartographic standards in Moldova

- 2.1.1. : Conduct an inventory of existing cartographic fund and legal frameworks, identifying gaps and areas for improvement to align with EU standards.
- 2.1.2. : Identify and implement applicable EU cartographic standards in Moldova, ensuring compliance with EU INSPIRE regulations.
- 2.1.3. : Develop methodologies for the interpretation and processing of data obtained through Remote Sensing, drawing on EU-promoted best practices and Dutch expertise.
- 2.1.4. : Conduct training sessions for relevant Moldovan institutions on EU methodologies for interpreting and processing remote sensing data.

Output 2.2 Analysis of current cadastre services is conducted to improve efficiency

- 2.2.1. : Conduct a detailed analysis of existing cadastre services to evaluate customer satisfaction, identify inefficiencies, and assess how well current services align with international best practices.
- 2.2.2. : Gather feedback from users of cadastre services to propose improvements in service delivery, with a focus on increasing accessibility, transparency and efficiency
- 2.2.3. : Draft and present recommendations for improving cadastre services to relevant authorities. Implement proposed changes based on feedback and analysis to reduce processing times and enhance service quality.

Output 2.3 Organisation of capacity-building workshops and trainings for data managers and specialists:

- 2.3.1. : Conduct capacity-building workshops for specialists and data managers on EU-compliant spatial data management techniques.
- 2.3.2. : Develop a comprehensive training program on data quality standards and EU-compliant spatial data management, including practical applications for remote sensing data processing.
- 2.3.3. : Develop and facilitate intensive training related to spatial data (vector, raster and services) harmonisation for the entities that already have spatial non-harmonised spatial data

Outcome 3: User engagement and cross-sector utilisation of spatial data is promoted, increasing civic engagement and supporting democratic governance (Coordination: THA).

Output 3.1: Increase in public awareness and user engagement:

- 3.1.1. : Design and deliver a training program on civic engagement in data governance focussing on the role of spatial data in promoting transparency, accountability, and evidence-based decision-making.
- 3.1.2. : Design and implement a civic engagement strategy highlighting the importance of spatial data and cartography for governance and societal development.
- 3.1.3. : Develop user-friendly guidelines detailing best practices for various user groups on how to effectively access, interact with, and apply spatial data for decision-making and public services.
- 3.1.4: Publish and promote the guidelines through AGCC geoportals, webinars and direct outreach to key stakeholder groups. The civic engagement strategy will include a series of tutorials, webinars and workshops to explain how to use the guidelines effectively.
- 3.1.5. : Launch and continuously improve a public awareness campaign using digital platforms, social media, and public outreach events. This campaign will engage citizens and key stakeholders by highlighting the benefits of spatial data for governance.

Output 3.2: User engagement and cross-sector collaboration is enhanced through Dutch-Moldovan Exchange and training

- 3.2.1. Establish a staff and student exchange program between Dutch and Moldovan knowledge institutions, facilitating the exchange of best practices in spatial data management, governance, and public service delivery.
- 3.2.2. Establishment of a practical framework to guide stakeholders in designing spatial datasets and metadata that will be validated using the INSPIRE Validator platform.
- 3.2.3. Organise a series of user training sessions and webinars covering advanced techniques in spatial data interpretation and cross-sector applications.

Output 3.3. Capturing, documenting, and disseminating knowledge gained during the project's implementation.

- 3.3.1. Organise a conference on enhanced NSDI for Transparent Governance - bringing together stakeholders from Moldova and the Netherlands.
- 3.3.2. Organise two NSDI- days bringing together experts from national and international networks to review Moldova's progress, identify areas for improvement, and develop solutions for advancing the country's spatial data infrastructure.

3.3 Monitoring, Evaluation and Learning (MEL) approach

To effectively implement the MEL strategy, the project will establish a **structured management framework** comprising the following components (see also 3.5) :

- **Project Coordinator (THA):** The Project Coordinator will take primary responsibility for managing the MEL strategy, working in consultation with and incorporating input from all project stakeholders. An external evaluator will be contracted to gather data for the final evaluation.
- **The operational working group,** composed of THA, ITC, Kadaster, KU Leuven, and a stakeholder group coordinated by AGCC, plays a pivotal role in MEL by meeting twice a year to track project progress and assess the effectiveness of activities. This group is responsible for collecting both qualitative and quantitative data, facilitating discussions on successes and challenges, and making recommendations for adjustments to improve implementation. Additionally, by incorporating feedback from various stakeholders, the operational working group ensures that the evaluation process is relevant and responsive to the needs of all parties involved, ultimately aligning project outcomes with established objectives.

Find below the M&E framework in which all outcomes and outputs are linked to indicators and data sources. Note that some of the obligatory Matra indicators have been rephrased and integrated to fit into this framework. Other obligatory indicators have been placed under the project objective as they are cross-cutting and not linked to any one outcome. All targets will be measured in a sex-disaggregated manner to ensure a comprehensive understanding of gender representation.

Indicators		Data Source and Collection Method	Baseline	Target
<p>Project objective: To strengthen Moldova’s democratic society and rule of law by enhancing the capacity of public institutions to implement transparent, evidence-based governance through improved geospatial data management, legal compliance with EU standards, and increased civil engagement, utilizing Dutch expertise.</p>				
0.1: Improved skills, knowledge, and ideas	# of people informed and trained in the fields of democratisation, governance and rule of law	Attendance records of training and knowledge exchange activities, interviews, surveys and results of outreach activities (f.e. campaign analytics)	0	<p>from 22 institutions responsible for spatial data - at least 220 people informed, trained and involved</p> <p>from 600 local public administrations responsible for spatial data - at least 3000 people informed, trained and involved</p>
	% of the total budget spent in Moldova	Budget reports	n.a.	10% of the total budget spent in Moldova
0.2: Localisation	# of local actors (organisations) meaningfully engaged in whole project (launch, implementation and M&E)	Attendance lists	0	8 local organisations engaged in each project phase
	% of activities in urban and rural areas	Meeting and training records	n.a.	At least 20% of activities in rural areas, 80% in urban areas
0.3: Bilateral relations	# of documented insights or lessons learned from the project activities that are relevant to Dutch diplomacy and policy formulation	Document and activity review	0	5
	# (M/F) of participants (individuals) in knowledge exchange activities between Moldovan and Dutch institutions	Attendance lists	0	At least 50 participants
<p>Outcome 1: Improve legal and institutional frameworks for cross-border and in-country cooperation in spatial data infrastructure</p>				

1.1: # of policy documents and legislative amendments initiated	Policy and legislative records, document analysis, stakeholder interviews	0 documents related to cross-border cooperation, fragmented framework for in-country collaboration	At least 9 policy documents initiated and aligned with EU standards by the end of the project
1.2: % of stakeholders that report improved collaboration in spatial data governance	Surveys and interviews post-policy implementation	50% of stakeholders report collaboration in spatial data governance	70% report improved collaboration
Output 1.1: Improved governance framework for cooperation			
1.1.1: # Governance guidelines developed and approved	Document reviews	5 guidelines and 2 cooperation agreements	At least 9 additional governance guidelines developed and approved
1.1.2: Level of satisfaction with AGCC governance framework	Survey distributed post-launch	n.a.	60% satisfaction rate
Activities for Output 1.1: Organize an opening event, conduct legislative analysis, develop a governance structure, establish coordination procedures			
Output 1.2: Strengthened institutional capacity for policy formulation			
1.2.1: # of AGCC staff (m/f) trained in strategic policy formulation	Training records	3 trained staff (2024)	At least 10 AGCC staff trained
1.2.2: % of trained staff applying new skills	Post-training survey	20% report applying policy formulation skills	70% report applying skills
1.2.3: # of project staff (m/f) in study tour to the Netherlands	Attendance records	0	At least 10 staff joined
Activities for Output 1.2: Design training program, organize study tour			
Output 1.3: Establishment of Strategic Task Force			
1.3.1: Task force established and # of meetings held	Meeting records	0	Task force established by Month 12 with at least 3 annual meetings
1.3.2: # of actions initiated by task force	Reports and minutes	0	At least 2 collaborative actions initiated
1.3.3: # project staff (m/f) in knowledge exchange workshop	Attendance records	0	At least 20 staff joined
Activities for Output 1.3: Establish task force, create cooperation plan, organize knowledge exchange workshop			
Outcome 2: Accelerate accessibility, harmonisation, and standardisation of spatial data			

2.1: Level of increase in cadastre service efficiency	Customer satisfaction surveys	n.a.	60% of respondents indicate satisfaction in service delivery
Output 2.1: Cartographic standards implemented			
2.1.1: # of cartographic standards implemented	Compliance reports	0	At least 5 standards implemented
2.1.2: # Moldovan institutions trained on EU methodologies	Training records	0	At least 10 institutions trained
Activities for Output 2.1: Inventory cartographic processes, implement EU standards, develop methodologies, conduct training			
Output 2.2: Analysis of current cadastre services			
2.2.1: # of inefficiencies identified and addressed	Reports from analysis	First 9 months of 2024 – 41 incoming petitions were registered as non-compliant	At least 20 inefficiencies identified and addressed
2.2.2: level of user satisfaction with cadastre services post-improvements	Surveys	n.a.	60% satisfaction rate
Activities for Output 2.2: Conduct analysis, gather feedback, present recommendations			
Output 2.3: Capacity-building workshops for data managers			
2.3.1: # of specialists and data managers trained (m/f)	Attendance records	n.a.	20 participants
2.3.2: # training sessions conducted	Training material provided	n.a.	At least 8 sessions
Activities for Output 2.3: Organize workshops, prepare training material			
Outcome 3: User engagement and cross-sector utilisation of spatial data			
3.1.1: % of citizens and stakeholders reached through campaigns	Campaign analytics	0	At least 20% impression share (total amount of estimated social media users in target group divided by impressions of social media posts)
3.2: Level of knowledge of spatial data's role in governance increased	Pre-and post-campaign surveys	n.a.	At least 30% increase in knowledge
Output 3.1: Public awareness and user engagement increased			
3.1.1: # of stakeholders (M/F) trained in civic engagement in geospatial data governance	Attendance lists	0	20 participants

3.1.2: # of user-friendly guidelines published	Monitoring downloads	0	At least 1 guide published
Activities for Output 3.1: Design training program, implement engagement strategy, publish guidelines			
Output 3.2: Enhanced cross-sector collaboration			
3.2.1: # of Moldovan participants (m/f) in exchange programs	Attendance records	0	At least 10 participants
3.2.2: # of joint publications/research projects completed	Project documentation	0	At least publications or projects
Activities for Output 3.2: Establish exchange program, organize training sessions			
Output 3.3: Knowledge captured and disseminated			
3.3.1: # of knowledge-sharing events	Event minutes, attendance records	0	At least 4 knowledge sharing events
3.3.2: % of stakeholders reporting positive impact	Surveys	n.a.	40% report positive impact
Activities for Output 3.3: Organize conference and NSDI days			

3.4. Communication strategy

The MATRA programme aims not only to enhance the knowledge and skills of participating institutions in various thematic areas but also to strengthen the relationship between the Netherlands and target countries, including Moldova. A well-developed communication strategy is essential to document the project's successes and demonstrate the collaborative effort between Dutch and Moldovan institutions. By effectively communicating project activities, goals, and outcomes, we can increase visibility for the MATRA programme and showcase international cooperation. A strong communication plan will amplify the project's impact, ensuring that Moldova and the broader region benefit from these efforts. Our proposed communication strategy includes the following components:

The **project website** will serve as a comprehensive resource, featuring regular updates on project activities, outputs, and reports. This online platform will facilitate transparency and stakeholder engagement, allowing participants in training activities to access their online learning spaces seamlessly. The website will also host a dedicated section for user-friendly guidelines to assist the public and professionals in navigating the new geospatial services and understanding their benefits.

Activity-level visibility will be prioritised, ensuring consistent recognition of the MATRA programme's contributions during public events in Moldova. All partners will implement visual branding and messaging that highlights Dutch institutional support at stakeholder meetings, workshops, and training sessions. This visibility is vital for reinforcing the collaborative nature of the project and its impact on local governance.

storytelling and impact will be utilised to convey the project's achievements and real-world applications. Annually, two impact stories will be developed and disseminated through multiple channels, including the Embassy and project partners. These narratives will spotlight successes and testimonials from beneficiaries, demonstrating how the project improves land management and geospatial services.

Testimonials and promotions will be collected from beneficiaries to highlight the impact of the training and modernisation efforts. These testimonials will be shared with the Embassy and utilised

in various communication materials, reinforcing the project's value and encouraging broader public support.

In addition to the previously outlined components, **outreach to the general public in Moldova** will be a crucial element of our communication strategy, in line with objective 3 of the project plan. Through the Civic Engagement Strategy (activity 3.1.2), direct interaction between project representatives and the public will be encouraged through feedback and participation in governance. Additionally, the publication of user-friendly guidelines (activity 3.1.3) will provide essential information in accessible formats, ensuring that all citizens can easily understand and utilize the new geospatial services being developed. This approach not only informs the public but also empowers them to engage actively with the institutions involved in land management and governance. Overall, this outreach will align with the broader communication plan by enhancing visibility and fostering trust between public institutions and the communities they serve, ultimately contributing to a more inclusive and participatory governance model in Moldova.

A **communication manager** will support the project team as a dedicated advisor in amplifying the programme's impact.

3.5 Planning, division of tasks and project team

The Project Team

The project is implemented by a consortium consisting of THA and ITC. Each partner brings unique experience and expertise to the project. THA is the consortium lead. As a renowned international training institute in the field of local governance, it brings highly relevant knowledge in training design for public servants related to good governance, transparency, integrity and citizen participation to this project. ITC (University of Twente) brings advanced expertise in geospatial sciences and technology, with a focus on spatial data infrastructure, remote sensing, and geographic information systems (GIS). **In this consortium, THA will take responsibility for the overall project management and the components linked to objective 1 and 3.** ITC will take the lead in the components under objective 2. To implement the project effectively we have set up a project team with the roles and responsibilities as set out below.

Project Coordinator (THA): Responsible for overall project management and coordination, including the timely and careful execution of all activities, monitoring and evaluation, and financial and narrative reporting; responsible for the implementation of the activities under the responsibility of THA; Point of contact for RVO; Secretary of the Project Board; Chair of the Strategic Steering Committee; Authorised on behalf of the consortium to make decisions related to the project within the frameworks set by the Project Board.

(Senior) Project Manager (ITC): First point of contact for the Project Coordinator regarding project-wide matters; Member of the consortium working group; Responsible for the implementation, M&E and reporting of the activities under the responsibility of the respective consortium partner.

Project officer (THA): Support the project coordinator and managers in the management and implementation of the project.

Communication advisor (THA): Responsible for – in coordination with the project team – designing and coordinating the communication strategy.

Experts: Throughout the implementation, the project will make use of external key experts. These will primarily be drawn from Kadaster and KU Leuven, each of which will have a focal point as part of the project team. However, the project will also make use of Moldovan expertise to contextualise the training materials and where needed draw on international or Dutch non-government affiliated expertise (e.g. academics) where specific expertise is needed.

The operational working group meets quarterly to review project progress, assess collaboration among partners, and evaluate the outcomes of activities. Decisions will be made through constructive discussion and consensus. If necessary, issues will be escalated to the project board for resolution.

This working group consists of the project team plus the core group of main stakeholders' representatives (coordinated by AGCC).

The strategic steering committee meets biannually bringing together members from all key stakeholders (including the Dutch Embassy) to review overall project direction and strategic alignment.

The project board meets once a year to evaluate the progress of the project and collaboration between the partners and make adjustments as necessary. Interim reports are discussed and the annual plan (including the budget) is approved by the project board. The project board consists of the project coordinator (THA) and the project manager (ITC). If applicable, other team members can serve as advisors on the project board to consult on specific issues.

PROJECT TEAM	
Project Coordinator (THA) - Melissa Van de Bank (F)	Experienced Program Manager with over 7 years of expertise in leading international capacity-building initiatives and an additional 4.5 years focused on development programs related to land management. Extensive experience as a trainer and facilitator including the successful management and delivery of a wide variety of multistakeholder training programs on land governance, local economic development and fiscal decentralisation in diverse contexts, such as Somalia, Burkina Faso, Jordan, and Burundi.
Project Officer (THA) – Heba Sabra (F)	Logistical officer experienced in back office support including travel, insurance and finance.
Program Manager (ITC) - Chiel Stroeven (M)	Experienced program manager with over 10 years of experience in the management of complex, interdisciplinary projects, particularly within the fields of geospatial science and technology.
Focal Point ITC – Dr. Dimo Todorovski (M)	Senior lecturer on Land Administration and Land Governance at Faculty ITC University of Twente. Member of the Management team of the Urban and Regional Planning and Geo-Information Management – UPM department and Coordinator of Masters Specialisation Geo-Information Management for Land Administration-GIMLA. 19 years of work experience in the Agency for Real Estate Cadastre from the Republic of North Macedonia and 13 years of research and work experience at ITC. MSc in Geo-Information Management (ITC) and PhD in Post-Conflict Land Administration for State Building (UT).
Senior advisor ITC: Associate Professor – Dr. Mila Koeva (F)	Associate Professor in “3D city digital twins based on geospatial technologies for improved land management and urban planning” at ITC University Twente. She has a PhD in “3D modelling in architectural photogrammetry” from the University of Architecture, Civil engineering, and Geodesy in Sofia. She also holds an MSc. degree in Engineering (Geodesy) from the same institution.
Communication Manager (THA) - Katharina Koidl (F)	Communication manager with 5 years of experience in communication and marketing for international capacity-building projects.

Focal Point Kadaster - Haico van der Vegt (M)	Manager for Europe and Central Asia at Kadaster International, with 34 years of experience in the acquisition and management of international projects related to land administration, national spatial data infrastructure and topographic mapping.
Senior Advisor Kadaster - Dr. Eva-Maria Morscher-Unger (F)	Senior Land Administration Advisor, with 12 years of experience in international projects. Msc in Geodesy and Geoinformation from TU Vienna, and PhD in Land Administration.
Focal Point KU Leuven – Prof. dr. ir. Joep Crompvoets (M)	Full professor at KU Leuven Public Governance Institute holding the chair 'Information management in the Public Sector'. Secretary-General/Vice-President of EuroSDR - European Spatial Data Research network. More than 25 years of experience in relevant international projects (incl. Moldova). MSc degrees in Soil Science and Geospatial Information Science, and a PhD Spatial Data Infrastructures at Wageningen University

While specific individuals have been recommended, these team members might be substituted by professionals with similar experience and expertise, depending on availability. This approach ensures flexibility and guarantees that the project can still benefit from highly qualified experts who can transfer critical knowledge to the beneficiary organisations.

The Project Activity Plan:

The consortium partners THA and ITC hold key responsibilities at the outcome level, overseeing the planning and implementation of outputs and activities. They will collaborate as needed with other project team members to ensure effective coordination. Any additional members involved in these efforts are also acknowledged in the responsibilities section of the Gantt chart.

This Gantt chart serves as a preliminary outline and will be refined following Activity 1.1.1 (project launch). After this initial phase, we will engage in discussions with all stakeholders to tailor the chart to local contexts and planning needs, making adjustments as necessary.

Work plan		Responsible	Y1				Y2				Y3				Y4			
			Jul-Sep 25	Oct-Dec 25	Jan-Mar 26	Apr-Jun 26	Jul-Sep 26	Oct-Dec 26	Jan-Mar 27	Apr-Jun 27	Jul-Sep 27	Oct-Dec 27	Jan-Mar 28	Apr-Jun 28	Jul-Sep 28	Oct-Dec 28	Jan-Mar 29	Apr-Jun 29
Output 1.1	Enhanced governance framework	THA																
1.1.1	Opening Event: Launch project, promote goals, foster collaboration	all partners																
1.1.2	Legislative Analysis: Assess Moldova's legislation against EU standards, identify gaps	kadaster/KUL																
1.1.3	Governance Structure: Create guidelines for data sharing, enhance interoperability	Kadaster																
1.1.4	Coordination: Streamline cooperation among government, academia, EU, and Dutch partners.	kadaster/KUL																
Output 1.2	Strengthened institutional capacity	THA																
1.2.1	Training Program: Upskill AGCC staff in policy formulation and EU alignment	ITC																
1.2.2	Study Tour: Exchange knowledge on NSDI frameworks in the Netherlands	Kadaster																
Output 1.3	Strategic task force formation	THA																
1.3.1	Task Force Establishment and meetings: Coordinate cross-border collaboration on spatial data	Kadaster																
1.3.2	Cooperation Plan: Create plan for governance, data exchange, and EU alignment	Kadaster																
1.3.3	Workshop: Knowledge exchange on NSDI applications, share success stories.	Kadaster																
Output 2.1	Cartographic Standards improved	ITC																
2.1.1	Inventory: Assess existing cartographic frameworks for gaps.	Kadaster																
2.1.2	EU Standards Implementation: Align cartographic practices with EU INSPIRE	Kadaster																
2.1.3	Methodologies Development: Create data processing methodologies.	Kadaster																
2.1.4	Training Sessions: Educate on EU methodologies for remote sensing data.	Kadaster																
Output 2.2	Cadastre Services Analysis	ITC																
2.2.1	Service Evaluation: Analyze cadastre services for efficiency and user satisfaction	kadaster/KUL																
2.2.2	User Feedback: Gather input for service delivery improvements	kadaster/KUL																
2.2.3	Recommendations: To enhance service quality and reduce processing times.	kadaster/KUL																
Output 2.3	Capacity-Building Workshops	ITC																
2.3.1	Workshops: Train on EU-compliant spatial data management	Kadaster																
2.3.3	Training: Focus on data quality standards and practical applications	Kadaster																
2.3.4	Intensive Training: Provide training on spatial data harmonization.	Kadaster																
Output 3.1	Increase public awareness	THA																
3.1.1	Civic Engagement Training: Educate on spatial data's role in governance																	
3.1.2	Engagement Strategy: Emphasize spatial data's societal impact	KUL																
3.1.3	User Guidelines: Create best practice guidelines for spatial data access	Kadaster																
3.1.4	Promotion: Share guidelines through geoportals, webinars, and outreach	Kadaster																
3.1.5	Awareness Campaign: Utilize digital platforms to engage the public.																	
Output 3.2	Dutch-Moldovan Exchange	THA																
3.2.1	Exchange Program: Facilitate staff and student exchanges for best practice sharing	ITC																
3.2.2	Framework Development: Guide on designing spatial datasets for INSPIRE validation	Kadaster/KUL																
3.2.3	Training Sessions: Offer advanced training on spatial data techniques.	Kadaster/ITC																
Output 3.3	Knowledge Dissemination	THA																
3.3.1	Conference: Host event on NSDI for Transparent Governance	all partners																
3.3.2	NSDI Days: Gather experts to assess Moldova's progress and solutions.	all partners																

3.6 Risk management

The GEO CODEX project employs a proactive risk management strategy to ensure long-term success and adaptability. By engaging key stakeholders from the outset, it fosters essential political support and aligns local priorities with EU standards. To bridge technical knowledge gaps, GEO CODEX emphasizes capacity-building through focused training, workshops, and study tours, equipping Moldovan institutions to sustain project outcomes. To navigate potential disruptions, including geopolitical instability, the project incorporates flexible implementation methods and a strong public awareness strategy to increase NSDI support. Coordinating with parallel international projects further minimizes competition and enhances synergies, reinforcing Moldova’s geospatial modernisation and EU integration goals.

Risk	Likelihood	Impact	Mitigating measures	Responsible partner
Lack of political willingness	Medium	High	Build strong stakeholder engagement early in the project to align priorities and demonstrate long-term benefits (f.e. activity 1.1.1)	THA
Lack of human resources and knowledge within public entities and the academic sector	High	High	Establish long-term capacity-building initiatives, including workshops, training programs, and study tours (f.e. activities 1.2.1, 1.2.2, 2.3.1, 2.3.2)	ITC
Lack of awareness of the INDS importance	Medium	Medium	Ensure project visibility and strong branding through multiple communication channels, including public awareness campaigns (f.e. activities 3.1.1, 3.1.5)	THA
Geopolitical instability could disrupt project activities and planning	Medium	Medium	Monitor geopolitical developments closely and use flexible implementation methods, such as hybrid or virtual interventions, as needed (f.e. activity 1.3.3,)	THA
Limits in available staff and time: slow implementation can jeopardize project success	Medium	High	Plan realistically, identify backstopping options, and allocate resources efficiently to manage workloads and avoid delays.	THA

Operational Changes: Unexpected organisational shifts can lead to delays or changes in commitment.	Medium	Medium	Establish flexible project timelines and contingency plans; ensure regular communication with stakeholders to reaffirm commitment.	THA
Competing projects: could lead to a shift in focus or priorities.	Low	Medium	Align with other ongoing (international) projects and coordinate efforts to prevent overlap or resource conflicts.	ITC

4. Policy contribution and relevance

4.1 Contribution to Matra Goals

Contribution to Matra Goals

The GEO CODEX project makes a significant contribution to the goals of the Dutch Matra G2G programme by enhancing the capacity of Moldova's public institutions in several ways:

Capacity Building in Public Institutions: The GEO CODEX project aligns with the Matra G2G goal of improving the capacity of public or semi-public organisations in Moldova by enhancing the institutional frameworks governing national spatial data infrastructure. Specifically, the project strengthens Moldova's Agency for Geospatial Data Coordination (AGCC), which plays a crucial role in evidence-based governance through the collection, management, and sharing of spatial data. This directly supports Moldova's efforts to modernise its public administration, improve decision-making processes, and promote transparency. By implementing best practices from the Netherlands, such as legal frameworks and governance structures, the project strengthens Moldova's ability to manage geospatial data efficiently, ensuring its institutions are better equipped to handle public services and policy formulation.

Promotion of Democratic Governance and the Rule of Law: Through its focus on making spatial data more accessible, transparent, and interoperable, the GEO CODEX project enhances the accountability and transparency of Moldovan governance. Transparent access to spatial data enables both public authorities and citizens to monitor land use, environmental changes, and infrastructure development, ensuring that government decisions are made openly and with public input. This promotes democratic governance and the rule of law, two core objectives of the Matra G2G programme. By making governance more data-driven and participatory, the project empowers citizens and civil society to hold public institutions accountable, fostering a more open and democratic society in Moldova.

Sustainable Partnerships: The project fosters strong bilateral ties between the Netherlands and Moldova through the exchange of expertise in spatial data governance. Dutch institutions, including Kadaster and ITC, contribute advanced knowledge in managing geospatial data infrastructure and aligning with European standards, particularly the EU INSPIRE Directive, Data Governance Act, Open data Directive, Interoperable Europe Act, GDPR etc. The involvement of The Hague Academy for Local Governance further enhances this effort by providing expertise in public participation and the promotion of good governance. This comprehensive knowledge transfer helps Moldova adopt European and international best practices, bridging the gap between Moldova's existing systems and EU standards. As a result, Moldova strengthens its capacity to participate in cross-border data initiatives, enhancing collaboration with Dutch and European entities while fostering a culture of transparency and accountability in governance.

The project not only aligns with but actively advances the overarching goals of the Matra G2G programme, supporting Moldova's integration into European governance structures and fostering deeper ties with the Netherlands.

Contribution to EU Agreements

GEO CODEX aligns closely with several key agreements between the European Union (EU) and Moldova, particularly in areas of strengthening the rule of law, good governance, and transparency. These priorities are central to Moldova's European integration efforts, as outlined in the EU-Moldova Association Agreement (2014) and the EU-Moldova Action Plans. Our project contributes directly and indirectly to the implementation of these agreements through several avenues:

Strengthening the Rule of Law and Good Governance: A key element of the EU-Moldova Association Agreement, specifically Article 21, focuses on enhancing governance, transparency, and the rule of law in Moldova. Our project supports these objectives by improving the governance of geo-spatial data and promoting civic engagement. Better management and accessibility of geo-spatial data enhance transparency in public decision-making processes, allowing citizens and civil

society to hold authorities accountable. For example, in areas like urban planning, environmental protection, land use, and infrastructure development, access to accurate data enables oversight, directly supporting Article 4 of the agreement, which calls for increased transparency in Moldova's public administration. Moreover, by promoting data-driven decision-making, the project aligns with the EU's emphasis on evidence-based policy under Article 21, helping Moldova combat corruption in areas like land management and infrastructure development.

Civic Engagement and Democratic Participation: Civic engagement is vital for democratic governance, and the EU-Moldova agreements, particularly in Article 4, emphasize the need to strengthen civil society and citizen participation in governance. By involving citizens and civil society organisations in the management and use of geo-spatial data, our project supports participatory governance, giving citizens the tools to better understand how decisions are made and how they impact their communities. In line with the EU's promotion of open government and open data principles, our project facilitates public access to valuable information, fostering transparency and innovation. This supports Article 3, which focuses on strengthening public trust in institutions, a core element of good governance and the rule of law.

Fostering Anti-Corruption and Accountability Measures: Corruption remains a major challenge in Moldova, and the EU has consistently pushed for reforms that enhance public sector accountability, as detailed in Article 21 of the Association Agreement. By improving access to geo-spatial data, our project helps reduce opportunities for corruption, particularly in land use and construction sectors. Transparent, publicly available data can curb cases of favouritism, illegal land use, and irregular urban development, aligning with EU-Moldova agreements focused on anti-corruption and governance reforms.

Institutional Capacity Building and Digitalisation: The EU-Moldova Association Agreement and the EU-Moldova Action Plans prioritise institutional strengthening and public service digitalisation, as referenced in Articles 107 and 108. Our project builds Moldova's institutional capacity to manage geo-spatial data, enhancing the effectiveness and transparency of public institutions. By integrating digital tools for public engagement, the project supports Moldova's digital transformation in line with EU priorities, improving both e-governance and public access to information.

Cross-Border Collaboration: Article 8 of the EU-Moldova Association Agreement emphasizes the importance of good neighbourly relations and cross-border cooperation. This project contributes to this goal by establishing a cross-border cooperation structure that aligns with EU standards. Geospatial data is essential for managing shared natural resources such as rivers, forests, and ecosystems, facilitating cooperation on environmental protection, disaster management, and infrastructure development. This supports regional integration and stability, key objectives of the Eastern Partnership and Articles 4 and 8 of the Association Agreement. For example, shared data platforms can improve coordination in cross-border transportation, energy networks, and environmental challenges, fostering regional cooperation and supporting the EU's broader goals of stability and security in Eastern Europe.

4.2 Thematic relevance

The GEO CODEX project directly supports the thematic relevance of the **rule of law** and **good governance**, emphasising a pluralist democracy where government actions are reliable, inclusive and democratic. This project significantly enhances integrity, transparency and accountability within public governance, particularly through the modernisation of the Agency for Geodesy, Cartography, and Cadastre (AGCC) and its associated agencies. By improving geospatial and cadastral infrastructures, the project addresses issues of outdated technologies and fragmented data management, which can undermine trust in public institutions. The adoption of modern tools ensures that data is accurate, reliable, and accessible, fostering transparency in land administration processes. This transparency is crucial for deterring corruption and promoting accountability, key elements of integrity in governance.

Furthermore, the project's emphasis on **civic engagement** through a dedicated strategy empowers citizens to participate actively in decision-making processes. By involving the public in governance, the project reinforces the idea that government actions must align with the needs and expectations of the community. This participatory approach not only enhances public trust but also establishes a mechanism for holding officials accountable, thereby reinforcing the integrity of the public service.

The publication of user-friendly guidelines also plays a critical role in promoting **integrity**. By making complex geospatial data accessible and understandable to the general public, the project fosters informed civic participation. This reduces the potential for misinformation and enhances the public's ability to engage meaningfully with government initiatives. Moreover, the integration of accountability mechanisms within the project framework ensures that citizens can monitor governmental performance. This not only encourages transparency but also builds a culture of integrity where public servants are held responsible for their actions.

In conclusion, the project significantly contributes to the integrity of government operations by modernising systems for transparency, promoting civic engagement, and establishing accountability measures. These elements collectively enhance trust in public institutions and foster a more reliable and accountable governance structure.

4.3 Complementarity

The project builds on a solid foundation of previous collaborations between the Republic of Moldova, the EU, and other international partners. To avoid duplicating efforts and ensure that subsidies are used efficiently, the project is designed to complement earlier initiatives, leveraging lessons learned while focusing on advancing Moldova's capabilities in areas that still need development.

Previous Collaborations and Their Outcomes

From 2007 to 2022, the Norwegian Ministry of Foreign Affairs, through the Norwegian Mapping and Cadastre Authority (Kartverket), supported the development of geodesy, cartography, and geoinformation in Moldova. This involved eight projects covering areas such as aerial imagery, digital elevation models, orthophotos, geoportals, geodetic positioning systems, LiDAR scanning, and digital terrain modelling. Key achievements include: the development of a large-scale digital base map, a register of geographic names, and investment plans for national spatial data.

Between 2010 and 2012, with support from the Government of Japan through the Japan International Cooperation Agency (JICA), contributed to creating digital spatial data in Moldova. This partnership was fundamental in digitizing Moldova's base maps, setting the basis for subsequent SDI developments.

The EU has supported Moldova through Twinning projects:

- The EU Twinning Project "Organisation, Rationalisation and Computerisation of the Mapping Process in Moldova," in partnership with Sweden's national mapping authority (Swedesurvey) and Croatia's State Geodetic Administration, successfully transposed the EU INSPIRE Directive into national law. The project also demonstrated NSDI solutions for Orhei and Mitoc and developed management tools for the NSDI geoportal.
- A second Twinning project (MD 16 ENI OT 01 19), supported by the State Geodetic Authority of Croatia, Poland's State Geodetic and Cartographic Office and the Netherlands Enterprise Agency, further advanced Moldova's NSDI geoportal. It included a pilot project in Ungheni for spatial data standardisation, capacity building, and the development of a data model aligned with INSPIRE standards.

The World Bank's ongoing project (2018–2025), funded through the International Development Association, focuses on property registration, valuation, and land administration system improvements, with a strong emphasis on capacity building and modernising Moldova's cadastral as well as geospatial infrastructure.

In March 2024, a memorandum of understanding was signed between Moldova's Agency for Geodesy, Cartography, and Cadastre and the Netherlands Cadastre, Land Registry, and Mapping Agency. This partnership marks a new phase of cooperation, aiming at modernising key areas of geospatial competence.

Lessons Learned from Past Initiative

Need for Harmonisation: While past projects successfully established foundational elements like orthophotos, geoportals and compliance with INSPIRE principles, gaps in data harmonisation and standardisation remain. Moldova needs continued support to achieve full interoperability and accessibility of its geospatial data.

Capacity Building: Capacity-building programs were launched in earlier projects, however the need for advanced, hands-on training, especially in geospatial information management with its related legislation and outreach processes persist. Integrating international expertise, such as Dutch experts have proven beneficial. Further institutionalising these capacity-building programs is needed.

Stakeholder Engagement: Previous efforts highlight the importance of engaging stakeholders across different sectors (public, private and civil society). However, awareness of SDI's value remains limited among citizens and some institutions, requiring more targeted and participatory civil engagement strategies.

Sustainability and Long-Term Impact: Projects like the ones listed above, and specifically the World Bank's initiative, underscore the importance of sustainable approaches, particularly in property registration. However, aligning Moldova's SDI with international standards requires robust institutional governance and policy frameworks.

GEO Codex Projects Added Value and Complementarity

The GEO CODEX project adds value by building on these previous achievements while addressing specific gaps and integrating new technological and governance components. The project's design ensures complementary in the following ways:

- Outcome 1: the project builds on legislative work done under previous EU Twinning projects and the World Bank project by enhancing legal frameworks for both cross-border and in-country cooperation, ensuring Moldova's policies align with EU standards while integrating advanced data-sharing technologies. Activities: Development of governance guidelines
- Outcome 2: By focusing on the standardisation and accessibility of spatial data, the project complements efforts by the World Bank and Norwegian agencies, advancing Moldova's capabilities in geospatial data management. Activities: Conducting comprehensive training sessions for Moldovan institutions using best practices from Dutch expertise
- Outcome 3: The project's emphasis on civic engagement builds on initiatives introduced during the EU Twinning projects and the World Bank's engagement strategy. By enhancing the participation of civil society and promoting the use of spatial data in decision-making processes, the project ensures a comprehensive approach to democratising geospatial information. Activities: Organising knowledge exchange workshops.

The new project, being designed for 4 years, aims for long-term strategic impacts going beyond the technical achievements of previous initiatives.

5. Sustainability

A better functioning National Spatial Data Infrastructure (NSDI) with robust governance structures and enhanced staff capacity will offer long-term benefits by reducing policy-making costs and improving effectiveness across various sectors. Having geospatial data available for all societal challenges ensures that decision-making is informed, targeted, and cost-effective. As the NSDI proves its value, it will garner greater support from the government to further open up its data infrastructure, as increased data sharing leads to better results for society. The experience of the Dutch NSDI (Key Registers), where there has been significant growth in data and services used by governments, the private sector, and citizens, demonstrates this dynamic.

The GEO CODEX project aims to achieve several sustainable outcomes:

NSDI Normative Framework Integration: At the outcome level, Moldova's National Spatial Data Infrastructure (NSDI) will align with European Union policies, notably the INSPIRE Directive, Data Governance Act, Open Data Directive and Interoperable Europe Act, facilitating long-term international collaboration. This integration will enhance Moldova's role in cross-border data exchange and foster interoperability, ensuring that its spatial data can be accessed and used within Europe. This outcome builds on Objective 1, where the legal and institutional frameworks are strengthened, particularly through the creation of governance structures for cross-border cooperation (Outcome 1.1), establishing Moldova's compliance with EU regulations and ensuring the long-term sustainability of these improvements.

Increased Availability and Transparency: The project will result in transparent and accessible spatial data for central and local administrations, fostering evidence-based governance and enhancing public trust in decision-making. For instance, the increased accessibility of harmonised datasets will contribute to transparency and accountability in public administration (Outcome 2.1), aligning Moldova's data management practices with EU cartographic standards and improving public access to geospatial data for long-term governance enhancements. This transparency is crucial for maintaining public trust and ensuring that Moldova's governance becomes more inclusive, as envisioned in Objective 3 of the project plan.

Cost Efficiency and Data Sharing: A key sustainable outcome is the creation of interoperable and shared spatial data systems that reduce costs related to data management and storage, while also avoiding duplication of efforts. By establishing efficient data-sharing mechanisms across public institutions, Moldova can maintain its geospatial infrastructure with fewer resources. This builds on Outcome 1.3, where the creation of a strategic task force for in-country and cross-border collaboration enhances Moldova's capacity to share data across borders, aligning its spatial data systems with EU standards.

Creation of New Harmonised Data Sets: The project will increase the number of harmonised data sets and metadata in Moldova, enhancing the usability of data across various sectors, including urban planning, environmental monitoring, and infrastructure development. This harmonisation of data not only supports Moldova's policy development but also ensures the country remains aligned with international best practices, particularly through the cartographic standards implemented under Outcome 2.1. Long-term sustainability is guaranteed as Moldovan institutions adopt methodologies for remote sensing data processing and management that adhere to EU standards.

These outcomes will contribute to institutional sustainability and local embeddedness, as well as to - overtime - financial sustainability:

Institutional Sustainability and Local Embeddedness

By embedding reforms within Moldova's legal frameworks and building the capacity of its institutions, the project ensures lasting governance structures. Activity 1.1.3 and Activity 1.2.1 focus on strengthening institutional governance and enhancing the skills of AGCC staff, ensuring that Moldova can manage its NSDI according to EU standards. Also, the establishment of the Strategic Task Force (Activity 1.3.1) further supports sustainability by ensuring continuous cross-border and in-country

collaboration. This body will coordinate future initiatives and maintain Moldova's integration into international geospatial data networks.

Local Embedding and Civic Engagement: The project ensures that its outcomes are deeply rooted in the local context by engaging various stakeholders. Activities like 3.1.1 and 3.1.5 focus on promoting civic engagement through training programs and public awareness campaigns. These efforts foster a strong local understanding of the value of spatial data in governance and empower civil society and private sector actors to participate in the NSDI. Also, the staff and student exchange program (Activity 3.2.1) between Dutch and Moldovan institutions will further strengthen local capacity by fostering long-term knowledge sharing, ensuring that Moldova has the expertise to manage its geospatial data infrastructure sustainably.

Capacity Building for Lasting Impact: Capacity-building efforts such as Activity 2.3.2, which trains local data managers in EU-compliant spatial data management, and Activity 2.1.4, focusing on training for remote sensing data processing, ensure that Moldovan institutions are equipped with the technical expertise needed to maintain and evolve the systems established during the project. By focusing on the development of Moldova's internal expertise, the project ensures that local actors can sustain the geospatial infrastructure without relying on external assistance. The continuous engagement with Dutch institutions, for example through the study tour (Activity 1.2.2) also ensures a long-term channel for knowledge exchange, further contributing to institutional sustainability.

Financial Sustainability

The improvements in service delivery resulting from Activity 2.2.3, which involves proposing recommendations to enhance cadastre services, will reduce administrative costs and improve public service efficiency. This ensures that the Moldovan government can maintain the geospatial infrastructure without needing additional financial resources. Also, the project's strategy of fostering collaboration between the public and private sectors (Activity 3.1.3) encourages financial sustainability by creating opportunities for private sector involvement in spatial data applications. This engagement can reduce reliance on government funding and encourage further investment in geospatial infrastructure.

The GEO CODEX project is designed with sustainability at its core, focusing on building long-lasting institutional capacity, fostering cross-sector collaboration, and embedding international/Dutch best practices within Moldova's governance structures. Through these sustainable outcomes, Moldova will continue to benefit from an improved NSDI, with reduced costs, enhanced public services, and greater civil engagement long after the project has ended.

6. Budget

Project management and communication costs: Following discussions with RVO, the costs for the communication strategy and overall project management (including reporting, M&E, and consortium coordination) have been allocated under separate outcomes: 1.4 (project management) and 3.4 (communication). This is not intended to suggest a direct link to outcomes 1 and 3, but rather to provide visibility for these cross-cutting costs, which are not tied to any specific outcome.

Travel costs: we have used the following amounts: Flight Moldova-Netherlands: €700; DSA international experts Moldova €63/day; Hotel costs Moldova €95 /day; DSA Netherlands local partners €40/day; Hotel costs Netherlands €100/day)

Local coordination costs: Funding has been allocated to hire a local coordinator to ensure effective project implementation.

7. Track record

See the separate annex attached