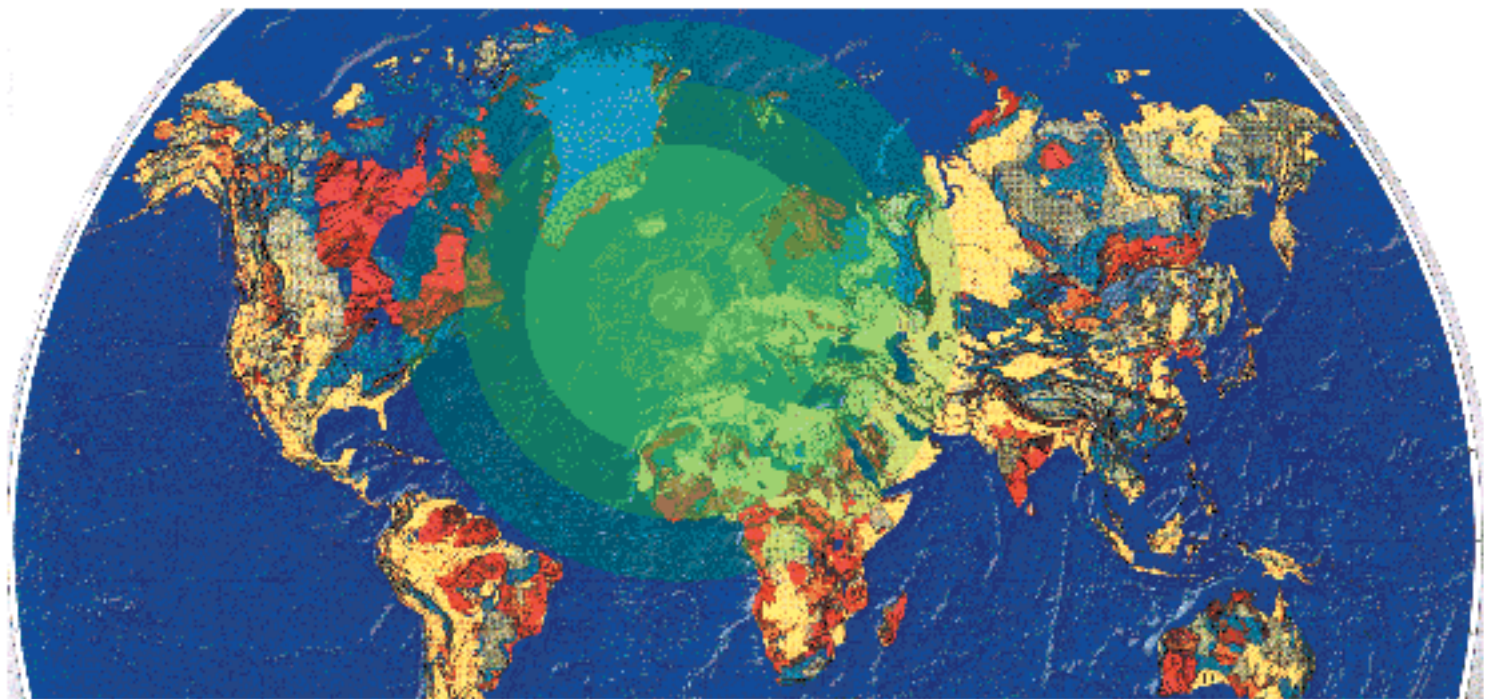


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Geological Survey of Ireland: A Strategic Vision



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Vision

The Geological Survey of Ireland (GSI), as the national geological agency, contributes to sustainable national development and environmental protection by providing decision-makers and stakeholders with best available geological information from comprehensive and up-to-date national geological databases.

Purpose

Geology exerts an important influence on Irish society: the earth beneath our feet forms the foundation for our infrastructure, acts as a pathway for the migration of contaminants, and contains aggregates, minerals and groundwater resources. Thus, there is a need for a national store of existing geological information and knowledge to inform and support decision-makers at all levels from the local to the national. This facilitates optimum decision-making by the relevant sectors and land-use planners, ensuring development projects are advanced efficiently while taking account of the need to sustainably manage both our earth resources and our environment. In addition, members of the public require information and knowledge of geology in the context both of developmental projects in their vicinity and as part of its desire to be aware of the heritage and history of their landscape.

Geological data is continually being collected from surface features and exposures, subsurface excavations, boreholes and geophysical measurements. A proportion is acquired directly by the GSI, but most is obtained by external sources. The GSI, as a designated repository of the National Archives, provides this store of geological information and knowledge. The GSI's core function is to acquire as much geological *data* as is possible and make each item of data usable by placing it in context and thus converting it into *information*. An important additional function of the GSI is to further enhance the available data by using staff expertise to turn *information* into *knowledge-based geological maps* and reports. From its position within government, it is able to provide this information and knowledge in an objective, multi-disciplinary, nationally-standardised, and nationally-integrated manner.

In this way, the GSI contributes towards the sustainable development of our earth resources and the protection of our environment, leading to better land use and planning decisions. Equally, the GSI provides an increased appreciation and awareness of geology, geological processes and the role they play in influencing and enhancing our everyday lives.



Successful urban development relies on geological information concerning foundation conditions, the nature and extent of groundwater, and the location of construction materials.



Corporate Strategic Goals

The GSI has five major long-term goals. The achievement of these goals is determined by means of a three-yearly Statement of Strategy. More detailed plans and milestones are contained in the annual GSI Business Plan, which takes account of its strategic vision, relevant developments in Irish society and the operational constraints under which GSI functions.

1) TO PROVIDE EASILY-ACCESSIBLE AND ACCURATE GEOLOGICAL INFORMATION

Its purpose is the development and continual review of systems which optimise data handling, data verification, and the provision of information to both internal and external customers.

Main outputs

- The ability to produce useful products by combining and superimposing datasets.
- The enhanced capacity to interact with customers and meet their needs more quickly and precisely.
- This output is driven by an information service, which encompasses standard database outputs, website, library, exhibition, publication sales and public office functions.
- Development and maintenance of a centralised database, storing all GSI information in a geographic information system.

Standards

- Stored data accurately represent the original records.
- Standards of relevance, timeliness, cost-effectiveness and ease of use as defined by internal and external customer surveys will be implemented.



GSI spent the first 50 years of its existence, until the 1890s, preparing bedrock maps such as these and they are still much in demand to support work on infrastructural projects, environmental protection and mineral resource development.



2) **SUPPORT SUSTAINABLE DEVELOPMENT, ENVIRONMENTAL PROTECTION, AND THE NATIONAL DEVELOPMENT PLAN**

Its purpose is to provide geological information and knowledge to central and local government and the private sector in support of sustainable management of our environment and its infrastructural development as envisaged in the National Development Plan and relevant Government policies.

Main outputs

- Provision of appropriate advisory services.
- Development of thematic, interpretative maps of land use suitability (accompanied by explanatory reports) which can be directly incorporated into planning and decision-making systems in local and central government.
- Land use suitability issues, centred round the nurturing of our environment, will concentrate on pollution risk to groundwater, risks of sterilising mineral resources, risks to geological heritage features and risks from geohazards.



The EU Water Framework Directive is designed to ensure that citizens right across Europe have access to adequate supplies of clean water. GSI supports this objective through a number of initiatives, including the provision to local authorities of decision-support tools in the area of land-use planning. These assist in ensuring that groundwater quality is protected.

Standards

- Product will be scientifically defensible: advice and interpretative products will be accompanied by references to the basis on which interpretations are made.
- Timeliness, cost-effectiveness, relevance and ease of use, as defined by customer surveys, will be implemented.

3) **TO MAP IRELAND'S EARTH RESOURCES**

Its purpose is to support the GSI's contribution to sustainable management and development of our environment through focused geological mapping and data gathering.

Main outputs

- Maps, reports and datasets of the bedrock and subsoils (Quaternary) geology of urban and rural areas (including depth to bedrock), and the morphology and geology of our extensive seabed areas.
- Maps, reports and datasets documenting the distribution and nature of mineral and groundwater resources and the parameters which control their effective exploitation and protection.



Ireland is no stranger to climatic change and over the past 100,000 years reduced ambient temperatures led to the extensive development of ice fields and glaciers across the country. A wide variety of surficial deposits formed during both the development and melting of these ice masses. During melting, sand deposits such as these were formed.

Standards

- Product will be scientifically defensible: interpretations will be accompanied by references to the basis on which they are made.
- Timeliness, cost-effectiveness, relevance and ease of use, as defined by customer surveys, will be implemented.

4) TO PROMOTE PUBLIC UNDERSTANDING OF THE ROLE OF THE GSI AND GEOLOGY IN IRISH SOCIETY

Its purpose is to increase government and public awareness of the role and value of the GSI in particular and of geology in general.

Main outputs

- The publication and dissemination of suitable outreach products and services in order to inform the general public on key aspects of our landscape and how we use it. Where feasible this will be done in conjunction with strategic partners.
- The development of effective links with a range of organisations, including those in third level institutes, central and local government, in order to maximise the impact of GSI.

Standards

- Products will be targeted at the widest possible audience and their sales will be monitored for market penetration.
- We will seek feedback from customers and stakeholders through marketing surveys and respond to their concerns.



Both residents and tourists alike find opportunities to explore and enjoy the wonderful landscapes of Ireland. GSI produces a range of products to enhance our enjoyment of these.



5) TO PROVIDE A STIMULATING, MOTIVATING, AND REWARDING WORK ENVIRONMENT FOR GSI STAFF

Its purpose is to ensure that GSI promotes job satisfaction and morale, stimulates good science, encourages cross-functional teamworking and rewards responsibility, innovation and increasing levels of competence. GSI is committed to implementing fully the equality agenda. It is recognised that these dimensions contribute to ensuring GSI is an effective organisation.

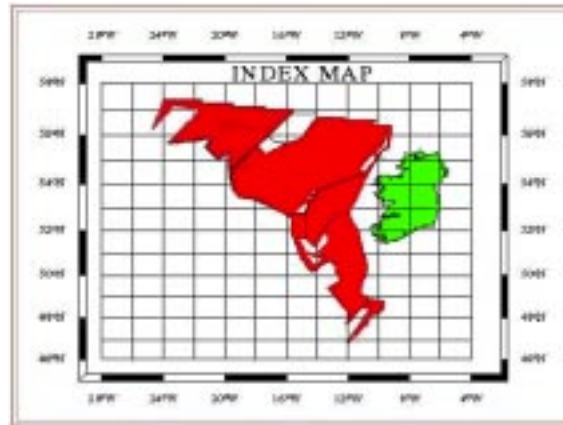
Main output

- Regular examination of the internal structure, operational responsibility, and project management systems within GSI.
- Regular re-evaluation of staffing and financial resources available to GSI.
- Regular review of staff training and development in the context of enabling GSI to provide an effective service.
- Opportunities for staff advancement are structured to gain maximum benefit from our specialists while maintaining a balance between operational and management activities.

Standards

- Considerations to be made within the framework of Partnership and the Performance Management, and Development System.

About 90% of the national territory lies beneath the sea. With its huge potential for fisheries, engineering and energy resources, adequate geological information is essential to ensure its development is sustainable. The map illustrates the extent of regional surveys completed by the end of 2001.



GSI has come a long way since it produced its first bedrock geological maps. For much of the second half of the twentieth century it focused on mineral resource development. Now an increasingly sophisticated society demands a diversified service that addresses the needs of many national sectors, including the environment, infrastructure, extractive resources, marine, heritage and tourism. GSI staff are equal to the many challenges involved

Implementing the Strategic Vision

The Strategic Vision outlined above is implemented through the GSI Statement of Strategy and the annual GSI Business Plan and these take account of the operational parameters of the environment in which GSI operates. A major parameter is the optimisation of available staff resources through prioritisation of goals on a regular basis, renewing the skills of all staff and employing staff on contract to address shortfalls in numbers or in expertise. Co-operation with the scientific and public sector communities, third level institutes and the private sector is another essential element to ensure success.

GSI does not hold a legal monopoly on any of the services it provides and therefore it can sustain its leading national role in geological sciences only by ensuring high quality and standards in the following areas:

- Delivery of relevant services in a timely, cost-effective manner.
- Continual optimisation of data quality, data handling and information delivery systems.
- Commitment to ongoing data acquisition to keep data holdings current.
- Continuous development of staff expertise and experience.
- Active promotion of the GSI's contribution and value.