CORINE Land Cover Report

Land Cover Meta-Information

Germany

Contact

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Umweltökonomische Gesamtrechnungen

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Introduction

From 1988, the CORINE land cover inventory has drawn attention to the services responsible for the management of the environment and the territory, and especially the "Interessengemeinschaft Fernerkundung der oberen Bundesbehörden"**(**IGFE). The preparatory stage consisted in various tasks:

- to ensure of the complementarity of the CORINE product with the STABIS project which aim the realisation of a land cover map at the scale of 1/25 000 in 70 classes;
- to realise the financial setting up;
- to organise the co-operation modalities of the various involved organisms.

Having finally started quite late, the German Land Cover project made use of the acquired experience of the different countries by, for example, developing the verification procedures of the intermediate results.

Team

Supervisor: Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (BMU, Bonn) and European Commission

Contractor: Statistisches Bundesamt (StBA, Wiesbaden)

Advisory Group

- Dr. Streuff, BMU, Bonn

- Falk Arnold, BfN, Bonn
- B. Jahr, UBA, Berlin
- Michel-Henri Cornaert, European Commission

Technical Project Manager: Michael Deggau, StBA, Wiesbaden

False colour images production: Dornier, Friedrichshafen

Photo-interpretation team:

Albrecht Wirthmann, Uwe Scherhag, Claudia Wiens and Petra Fehrentz StBA, Wiesbaden (supervisors photo-interpreters)

Work area I:

- Sebastian Aiblinger, GAF, München (responsible photo-interpreter)
- Walter Dewispelaere, Eurosense GMBH, Köln
  (responsible photo-interpreter)

Work area II:

- Sebastien Aiblinger, GAF, München (responsible photo-interpreter)
- René Beuchle, EFTAS, Münster (responsible photo-interpreter)
- Dr. Lutz Vetter, ifp, Offenbach (responsible photo-interpreter)

Digitalisation: Work area I: GAF, München and Eurosense GMBH, Köln

Work area II: GAF, München; EFTAS, Münster; ifp, Offenbach

Diffusion of the database: StBA, Wiesbaden and European Commission

Technical elements

Surface area: 357 000 km²

Projection system: Work area I: Transverse Mercator (Krassowski's ellipsoid, 542)

Work area II: Transverse Mercator (Bessel's ellipsoid, Postam datum)

Number of sheets at the scale of 1/100 000:

Work area I: 115
Work area II: 151

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 32

Acquisition period of the satellite data:

1989-1992 (from May to September)

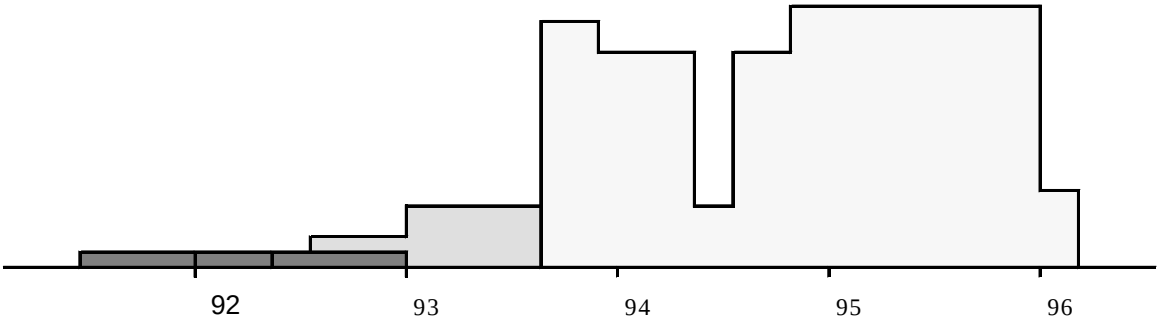
Main ancillary data:

Topographic maps at the scale of 1/50 000 and at the scale of 1/100 000, (area II) panchromatic aerial photographs at the scale of 1/70 000 and at the scale of 1/32 000 (Berlin's region); panchromatic aerial photographs at the scale of 1/70 000, or photographs at the scale of 1/100 000 taken with the cameras KFA-

1000 and MK4 on board of the RESURS satellite of the KOSMOS class if there were no panchromatic aerial photographs at the scale 1/70 000.

Completion of the project: December 1996

Calendar



- Preliminary Discussions
- Contract signature: Technical and administrative organisation
- Selection, processing, restitution of satellite images
- Photo-interpretation and quality control
- Digitalisation and integration into CORINE data base

Belgium

Contact

Jean-Claude Jasselette

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Introduction

The realisation of the project made profit of the existence of a large number of ancillary data such as the land cover inventory at the scale of 1/50 000 of the Walloon region.

Team

Supervisor: Institut d'Hygiène et d'Epidémiologie (IHE, Bruxelles) and European Commission

Contractor: Institut Géographique National/Nationaal Geographisch Instituut (IGN/NGI, Bruxelles)

*Administrative Project Manager:*Bernard Jouret, IGN/NGI, Bruxelles

*Technical Project Manager:*Jean-Claude Jasselette, IGN/NGI, Bruxelles

False colour images production: NLR, Amsterdam

Photo-interpretation Team

- Jean-Claude Jasselette, IGN/NGI, Bruxelles
- Eleonore Wolff, IGN/NGI, Bruxelles

Digitalisation: IGN/NGI, Bruxelles

Diffusion of the database: IHE, Bruxelles and European Commission

Technical elements

Surface area: 31 000 km²

Projection system: Lambert

Number of sheets at the scale of 1/100 000: 22

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 4

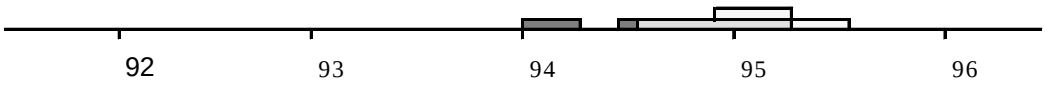
Acquisition period of thesatellite data: 1989 (May, August)

Main ancillary data:

Topographic maps at the scale of 1/25 000, panchromatic aerial photographs at the scale of 1/20 000, land cover inventory at the scale of 1/50 000 of the Walloon region.

Completion of the project: September 1995

Calendar



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Denmark

Contact

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Introduction

Because of the existence of numeric data (for example, forest inventory), the Danish team wished to develop and to use a direct satellite data interpretation methodology on screen. The commencement of the work was delayed by the setting up of an interpretation software on screen and the use of existing data of different scales. The realisation of the Land Cover cartography with the developed software appeared to be quite slow in the beginning due to errors and inexpediences in the software, but after corrections of these deficiencies the applied on screen methodology proved to be quite efficient.

Team

Supervisor: Landbrugs- og Fiskeriministeriet, København and European Commission

Contractor: Afdeling for Arealanvendelse (AFA), Statens Planteavlsforsøg (SP), Forskningscenter Foulum

Administrative Project Manager: Harald Mikkelsen, AFA

Technical Project Managers: Michael Stjernholm and Jan Nyholm Poulsen, AFA

False colour images production: Geometric correction: AFA

Photo-interpretation team

Michael Stjernholm and Jan Nyholm Poulsen, AFA (supervisors)

Work area I:

- Jette Grønlund and Henrik Nørgaard, AFA

Work area II:

- Kim Andersen, AFA

Work area III:

- Agnes Hansen, AFA

Digitalisation: see introductory comments

Diffusion of the database: Landbrugs- og Fiskeriministeriet, Miljøministeriet, Amterne and European Commission

Technical elements

Surface area: 44 000 Km²

Projection system: UTM

Number of sheets at the scale of 1/100 000 (equivalents): 37

(405 sheets at the scale of 1/25 000)

Satellite and used sensors: Landsat TM, SPOT XS and P

Number of scenes covering the state: 4 (Landsat), 24 (SPOT)

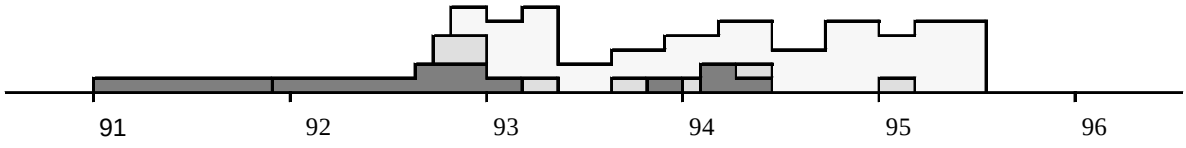
Acquisition period forsatellite data: 1989-1992 (from May to September)

Main ancillary data:

Topographic maps at the scale of 1/25 000, database of forests, coastal areas and lakes.

Completion of the project: December 1994

Calendar



Preliminary Discussion

Contract signature: Technical and administrative organisation

Selection, processing, restitution of satellite images

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Digitalisation and integration into CORINE data base

Spain

Contact

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Introduction

Spain is the second state who has realised CORINE land cover and is also the second largest state of the Union for its surface area. To face the hard task, IGN has divided the work in seven regional groups by insuring the co-ordination as well as the cartography of one of the work areas. The participation of a large number of specialists as well as an organisation and a rigorous co-ordination have granted the complete realisation of the project in thirty months. The results are the source of publications and specific uses.

Team

Supervisor: Ministries of Publics Works, Transports and Environment (MOPTMAU), Madrid and European Commission

Contractor: Instituto Geográfico Nacional (IGN), Madrid

*Administrative Project Manager :*Alfonso Osuna Novel, IGN, Madrid

*Manager Technical Secretariat:*Francisco J. García-Romero de Castro, IGN, Madrid

*False colour images production :*IGN, Madrid

Photo-interpretation team:

Work area I: Galicia

*Technical Project Manager:*José Ramon Chantada Acosta, Junta de Galicia

Responsible organism Junta de Galicia

- Josefina Adan Porto

- Alfonso Fumega Pineiro
- Francisco Fumega Pineiro
- José Maria Lopez Vizoso
- Maria Paz Lorenzo Codesio
- José Antonio Quiroga Diaz

Work area II: North

*Technical Project Manager:*Miguel Aran Mayoral, Government of Navarra

Responsible organism Government of Navarra

- Astrid Ballesta Remy
- Fermin Berrade Ayesa
- Arturo Barberena De Diego
- Ana Leranoz Goñi

Work area III: East

*Technical Project Manager:*Xavier Baulies i Bochaca, Instituto Cartográfico de Catalunya

Responsible organism Instituto Cartográfico de Catalunya, Barcelona

- Mar Joaniquet Tamburini
- Lydia Pineda Cortes
- Anna Tarda Leget

Work area IV: Centre

*Technical Project Manager:*José Sancho Comins, University of Alcala of Henares

Responsible organism University of Alcala of Henares

- Emilio Chuvieco Salinero
- Javier Martinez Vega
- Juan Javier Garcia-Abad Alonso
- Andrés Jimenez Garces
- Paulino Navalpotro Jimenez
- Rosario Escudero Barbero

Work area V: West

*Technical Project Manager:*Ana Sabate Martinez, University Complutense of Madrid

Responsible organism University Complutense de Madrid

- Félix Fernandez Gonzalo
- Agustín Gamir Orueta
- Isabel Garcia Viejo
- Marino Palacios Morera

Work area VI: South

*Technical Project Manager:*José Manuel Moreira Madueno, Junta de Andalucia

Responsible organism Environment Agency of Junta de Andalucia

- Antonio Barreda Alcobet
- Maria José Cuadrado Mateos
- Arturo Fernando-Palacios Carmona
- Maria Dolores Garcia Solano
- Ana Gonzalez Fernandez
- Elena Lopez de Montenegro Riscos
- Carlos Martinez Ortega
- Carmen Navarro Mezquita
- Felisa Otero Leon
- Manuel Rodriguez Surian

Work area VII: Islas Canarias

Technical Project Manager: Antonio Arozarena Villar, IGN, Madrid

Responsible organism IGN, Madrid

- Miguel Herrero Matias
- Eduardo Martin Montero

Digitalisation: Government of Navarra, Instituto Cartográfico de Catalunya, Junta de Andalucia, TAGSATEC sa, IGN

*Diffusion of the database :*CNIG - Madrid and European Commission

Technical elements

Surface area: 505 000 Km²

Cartographic projection system: UTM, time zone 29,30,31

Number of sheets at the scale 1/100 000: 296

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 34

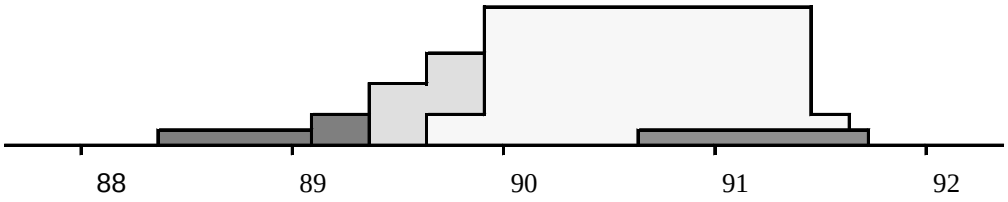
Acquisition period of the satellite data: 1985, 1987 and 1988 (from June to September)

Main ancillary data:

Topographic maps at the scale 1/100 000, work area at the scale 1/30 000, cultivation and forest maps at the scale 1/50 000.

Completion of the project: August 1991

Calendar



Preliminary Discussions

Contract signature: Technical and administrative organisation

Selection, processing, restitution of satellite images

Photo-interpretation and quality control

Digitalisation and integration into CORINE data base

France

Contact

Isabelle Forge

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Introduction

At the end of an important advice procedure of the interested organisms, the Ministry of Environment decided to start the realisation of the project on one third of the state in the South (150 000 km²). The works were given into the hands of a grouping of companies who assured 40% of the project financing. An inter-ministerial Committee has assured the setting up and the follow up of the project. However, an insufficient technical co-ordination has lead to the obligation of taking in its entirely the work of one of the three teams of photo-interpretation who had not sufficiently assimilated the project objectives and the methodology characteristics. The Centre and North areas are realised within the French Environment Institute by a team of photo-interpreters. This should facilitate the procurement of a homogeneous product.

Team

Work area I: South

Supervisor: Ministry of Environment, Paris and European Commission

Contractor: Institut Géographique National France International (IFI, Paris)

*Administrative Project Manager:*Jean-Louis Weber, Ministry of Environment, Paris

*Technical Project Manager:*Yves Heymann, SITEE, Paris

False colour images production:

Processing of the satellite data Unisfere, Besançon

Restitution of the paper printing: Institut Géographique National (IGN, Paris)

Photo-interpretation team

Work area Ia:

- Guy Croisille, SATEC, Paris (supervisor photo-interpreter)
- J.C. Largilliere, SATEC, Paris

Work area Ib:

- Alain Berthiaux, BRGM, Orléans (supervisor photo-interpreter)
- D. Fauconnier, BRGM, Orléans
- G. Kozminski, BRGM, Orléans
- J.M. Brosse, BRGM, Orléans
- J.P. Deroin, BRGM, Orléans

Work area Ic:

M. Gavoret and J.J. Treton, IGN, Paris (supervisors photo-interpreter)

- Michel Bossard, IGN, Paris
- J.C. Esnault, IGN, Paris
- P. Levy, IGN, Paris
- B. Ancellen, IGN, Paris
- G. Dioris, IGN, Paris
- F. Lhermitte, IGN, Paris

With the assistance of the agencies of Bordeaux, Nantes, Nancy and Aix-en-Provence

Digitalisation: ERICA, Paris ; SIRS, Lille ; IGN, Paris

Diffusion of the database: IFEN, Orléans and European Commission

Work area II: Centre

Supervisor: Ministry of Environment, Paris and European Commission

Contractor: Institut Français de l'Environnement, Orléans (IFEN, Orléans)

Administrative Project Manager: Philippe Boiret, IFEN, Orléans

Technical Project Manager: Ronan Uhel, IFEN, Orléans

Restitution of the paper printing: Unisfere, Besançon ; IGN Espana, Paris ; Geoimage, Spot Image, Toulouse

Photo-interpretation team:

- Michel Bossard, IFI, Paris (supervisor photo-interpreter)
- Renée Muller, IFI, Paris
- Sylvain Braustein, IFI, Paris
- Kate Tempany, IFI, Paris
- Ima Ross-Marti, IFI, Paris
- Alain Berthiaux, BRGM, Orléans
- Guy Croisille, SIRSS, Lille
- Sandrine Bousquet, SIRSS, Lille
- Gabriel Jassrain, IFI, Paris

- Bernard Cahagne, IFI, Paris
- Danielle Fauconnier, BRGM, Orléans

Digitalisation: SIRS, Lille ; Metalog, Paris

Diffusion of the database:

Technical elements

Surface area: 544 000 km²

Projection system: Lambert equivalent

Number of sheets at the scale of 1/100 000: 311

Satellite and used sensors: Landsat MSS, SPOT XS

Number of scenes covering the state: 42 (Landsat), 250 (SPOT)

Total number of used images: Work area I - 15 Landsat MSS, 40 SPOT

Work area II: 240 SPOT

Acquisition period for satellite data:

Work area I: 1987-1988 (from June to September)

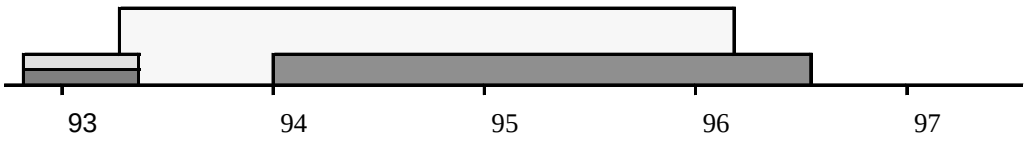
Work area II: 1989-1992 (from June to September)

Main ancillary data:

Topographic maps at the scale of 1/25 000, at the scale of 1/50 000 and at the scale of 1/100 000 (IGN), vegetation maps at the scale of 1/200 000 (CNRS), forest maps at the scale of 1/200 000 (IFN), work area at the scale of 1/30 000 and at the scale of 1/60 000 (IGN).

Completion of the project: January 1996

Calendar



Preliminary Discussions

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Selection, processing, restitution of satellite images

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Digitalisation and integration into CORINE data base

Greece

Contact

Katerina Romaidou

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Introduction

When the project started in Ellada, there were no existing specific equipment for the processing of the satellite data and there were only a few experience in the use of the data. The project has been given in hands of a unique interpretation team within the Hellenic Mapping and Cadastral Organisation (HEMCO) who has received the support of the European technical unit during the starting phase. The project makes progress quite slowly but, apart from an interruption of the works in 1991 due to administrative reasons, is continuing in good conditions with a specific attention to the regular validation of the results.

Team

Supervisor: Ministry of Environment, Planning and Public Works (IPEHODE, Athinai) and European Commission

Contractor: Hellenic Mapping and Cadastral Organisation (OKXE, Athinai)

Administrative Project Manager: Dimitris Makaritis, OKXE, Athinai

Technical Project Manager: Katerina Romaidou, OKXE, Athinai

Processing of the satellite data: Work areas I,II and III: Eurosense, Bruxelles

Work area IV: Eratosthenes, Athinai

Restitution of false colour images: Work areas I and II: Eurosense, Bruxelles

Work areas III and IV: Erathostenes, Athinai

Photo-interpretation team

Work area I/phase I: Attiki, South-West

- Evangelia Nikoloyanni, OKXE, Athinai

Work area II/phase II: Kriti, Centre and Isles Ionien

- Katerina Romaidou, OKXE, Athinai (supervisor photo-interpreter)
- Maria Perseli, OKXE, Athinai
- Tasia Katohoriti, OKXE, Athinai

Work area III/phase III: North

- Katerina Romaidou, OKXE, Athinai (supervisor photo-interpreter)
- Pandelis Hourdakis, OKXE, Athinai

Work area IV/phase IV: Isles Aegiun

- Katerina Romaidou, OKXE, Athinai (supervisor photo-interpreter)
- Maria Perseli, OKXE, Athinai
- Tasia Katohoriti, OKXE, Athinai
- Pandelis Hourdakis, OKXE, Athinai

Digitalisation: Work area I - Eratosthenes, Athinai

Other areas: OKXE, Athinai

Diffusion of the database: OKXE, Athinai and European Commission

Technical elements

Surface area: 132 000 km²

Projection system: UTM - ΕΓΣΑ 87

Number of sheets at the scale of 1/100 000: 134

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 20

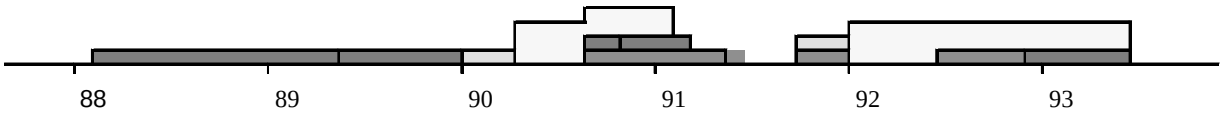
Acquisition period for satellite data: 1987 (from May to September)

Main ancillary data:

Topographic maps at the scale of 1/50 000 and at the scale of 1/100 000, aerial photographs at the scale of 1/30 000 (1986-1990), orthophotoplans at the scale of 1/20 000.

Completion of the project: October 1995

Calendar



Preliminary discussions

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Selection, processing, restitution of satellite images

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Digitalisation and integration into CORINE data base

Ireland

Contact

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Introduction

The CORINE Land Cover Project for the island of Ireland was implemented in the framework of a unique transborder co-operation involving survey teams from the Republic of Ireland and Northern Ireland (UK). Close co-operation and co-ordination ensured consistency in interpretation and completion of the project on schedule.

Team

Supervisor: European Commission

Contractor: Ordnance Survey of Ireland (OSI, Dublin), Ordnance Survey of Northern Ireland, (OSNI, Belfast)

Administrative Project Manager: Maurice Walsh, OSI, Dublin

Technical Project Manager: Geoffrey 0'Sullivan, Trinity College Dublin (TCD, Dublin)

Processing of the satellite data: ERA Maptec Ltd, Dublin and University College Dublin FIRST, Dublin

Restitution of false colour images: ERA Maptec Ltd, Dublin and UCD FIRST, Dublin

Photo-interpretation team:

Work area I:

- Martin Thorp, Geographic Department UCD, Dublin
- David Moore, Geographic Department UCD, Dublin
- Margaret Malone, UCD FIRST, Dublin

Work area II:

- Kate Tempany, Natural Resources Development Centre, TCD, Dublin
- Grace O'Donovan, Natural Resources Development Centre, TCD, Dublin

Work area III:

- Roy Tomlinson, School of Geosciences, QUB, Belfast
- Margaret Cruickshank, School of Geosciences, QUB, Belfast

Digitalisation: TCD, Dublin; UCD, Dublin; QUB/OSNI, Belfast; co-ordination: NRDC TCD, Dublin

Diffusion of the database: OSI, Dublin; OSNI, Belfast; European Commission

Technical elements

Surface area: Republic of Ireland - 70 300 km²

Northern Ireland - 14 100 km²

Projection system: Transverse Mercator

Number of sheets at the scale of 1/100 000: 15 (large format)

Satellite and used sensors: Landsat TM

Number of scenes covering republic of Ireland and Northern Ireland: 6 complete scenes and 1 floating quarter scene (Landsat)

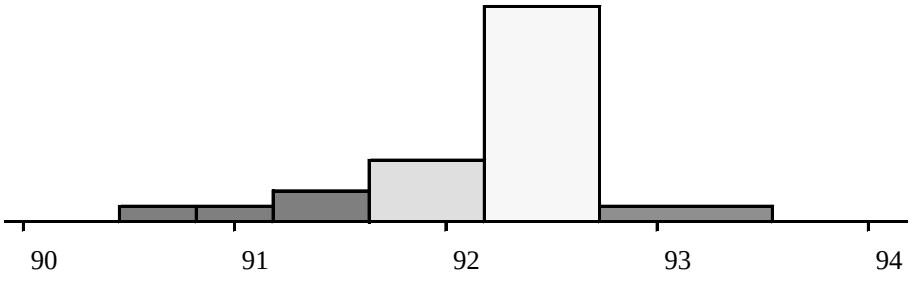
Acquisition period for satellite data: 1989 (May), 1990 (April, May)

Main ancillary data:

Aerial photography (scale 1/30 000), topographic maps, thematic Environmental/Conservation reports, soil and vegetation maps.

Completion of the project: July 1993

Calendar



Italy

Contact

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Introduction

The Ministry had foreseen to realise the project on a regional base. For 5 regions in the South, the Ministry called the ITA consortium (the results still have to be validated in details). In a second phase and in the framework of the SINA project, the government has granted to the regions funds for the realisation of the Land Cover project. From this date on, the setting up of the project for the 15 regions left during the several meetings has lead to the desire of the regions to participate into the project, to specify an organism for the co-ordination of the project as well as the approval vote by the regional parliaments of the project. The technical unit formed the interpreters during two workshops.

Team

Work area I: South

Supervisor: Ministry of Environment, Roma and European Commission

Contractor: ITA Consorzio, Roma

Administrative Project Manager: Patrizia De Angelis, Ministry of the Environment, Roma

Technical Project Manager: Aldo Giovacchini, ITA Consorzio, Roma

Treatment of the satellite data: Telespazio, Roma

Restitution of false colour images: Telespazio, Roma

Photo-interpretation team: (supervisor photo-interpreters)

Digitalisation: Telespazio, Roma

Diffusion of the database: Ministry of Environment, Roma and European Commission

Work area II: North, Sardegna, Sicilia

Supervisor: Ministry of Environment, Roma and European Commission and Regions

Contractor: Centro Interregionale, Roma

Administrative Project Manager: Patrizia De Angelis, Ministry of Environment, Roma

Technical Project Manager: Adriano Cumer, Centro Interregionale, Roma

Treatment of the satellite data: Telespazio, Roma

Restitution of false colour images: Telespazio, Roma

Photo-interpretation team:

Campania

- S. Veneri, S. Angelini, (N. Telespazio)
- Emilia-Romagna
- B. Cognigni, R. Arcozzi, (ALVEO digital)
- Friuli-Ven Giulia
- A. Gherardinger, T. Allibardi (TSA, Padova)

Lazio

- L. Rossi, I. Di Marco, T. Marasciulo, M. romano (ITALECO, Roma)

Lombardia

- A. Gherardinger

Piemonte

- C. Benone, B. Diegoli, I. Tinetti (CSI, Piemonte)

Sardegna

- Marini, Careddu, Crobu, Marceddu, Melis (Universitá Cagliari)

Sicilia

- P. Dainelli e altri (GEOMAP, Firenze)

Toscana

- Bocci, A, Annoni, R. Boca (RSDE, Milano)

Umbria

- R. Segatori, S. Togni, G.Caneshi (Regione)

Valle d'Aosta

- I. Tinetti, B. Diegoli (CSI, Piemonte)

Veneto

- C. Giaggio (Regione), A. Annoni, M. Bocci (RSDE, Milano)

Prov. Aut. Bolzano

- M. Bocci, A. Annoni (RSDE, Milano)

Prov. Aut. Trento

- S. Veneri, S. Angelini (N. Telespazio)

Digitalisation: RSDE, Milan

Technical elements

Surface area: 302 000 km²

Projection system: Gauss Boaga

Number of sheets at the scale of 1/100 000: 278

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 26

Acquisition period for satellite data:

Work area I: 1989, 1990 (April, May)

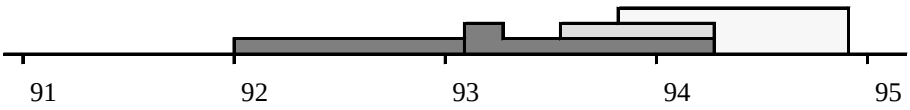
Work area II: 1990-1993 (May - October)

Main ancillary data :

Several thematic maps, aerial photographs N/B at the scale of 1/70 000 (1988-1989)

Foreseen completion of the project: April 1996

Calendar



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Luxembourg

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Introduction

The project has been realised in parallel with the land cover biophysical cartography at the scale of 1/20 000. This resulted in a nomenclature of up to 6 levels.

Team

Supervisor: Ministère de l'Environnement, Luxembourg and European Commission

Contractor: Walphot, Namur, G²ERE, Luxembourg

Administrative Project Manager: Charles Zimmer, Ministère de l'Environnement, Luxembourg

Technical Project Manager: Yves Reginster, G²ERE, Luxembourg

Processing of the satellite data: Walphot, Namur, G²ERE, Luxembourg

Restitution of false colour images: Walphot, Namur

Photo-interpretation team

- Marianne Martens, Eurosense, Bruxelles
- Luc Bontemps, G²ERE, Luxembourg

Digitalisation: Walphot, Namur, G²ERE, Luxembourg

Diffusion of the database: Ministère de l'Environnement, Luxembourg and European Commission

Technical elements

Surface area: 2 600 km²

Projection system: Gauss

Number of sheets at the scale of 1/100 000: 1

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 1 quarter scene

Acquisition period for satellite data: 1989 (May, August); “Down dating” with 1979 Landsat MSS and updating with 1995 SPOT XS

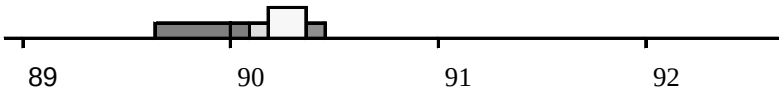
Number of used images: 2 quarters scene

Main ancillary data:

Aerial photographs infrared colour at the scale 1/15 000.

Completion of the project: April 1990

Calendar



Preliminary Discussions

Contract signature: Technical and administrative organisation

Selection, processing, restitution of satellite images

Photo-interpretation and quality control

Digitalisation and integration into CORINE data base

The Netherlands

Contact

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Winand Staring Centre SC-DLO

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Introduction

Nederland had an agricultural surface oriented land use database (LGN). At the beginning of the realisation of the project, an entirely automatic conversion of this database to the CORINE standards did not provide satisfactory results and the Dutch team decided to apply the classical CORINE method. The validation procedure has shown the thematic quality of the database but the recommendations of the manual having not been literally respected during the digitalisation, geographic defects appeared in the results.

Team

Supervisor: European Commission

Contractor: DLO Winand Staring Centre for Integrated Land, Soil and Water Research (SC-DLO, Wageningen)

*Administrative Project Manager:*Gerard Nieuwenhuis, SC-DLO, Wageningen

Technical Project Manager:Herman Thunnissen, SC-DLO, Wageningen

*Processing of satellite data:*SC-DLO, Wageningen

*Restitution of false colour images:*ITC, Enschede

Photo-interpretation team:

- Herman Thunnissen, SC-DLO, Wageningen
  (supervisor photo-interpreter)

Work area I:

- Hein Van Middelaar, SC-DLO, Wageningen

Work area II:

- Rob Dingen, SC-DLO, Wageningen

Digitalisation: University of Leuven

Diffusion of the database: SC-DLO, Wageningen and European Commission

Technical elements

Surface area: 42 000 km²

Projection system: Stereographic Bessel

Number of sheets at the scale 1/100 000: 8

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 4

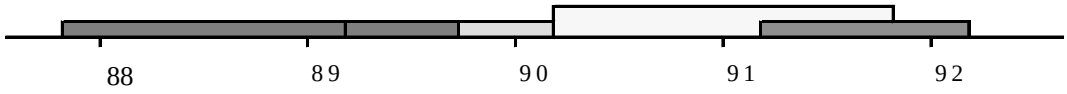
Acquisition period for used satellite data: 1986 (August) and for small areas 1986-1987 (from June to August)

Main ancillary data:

Topographic maps, work area at the scale of 1/18 000, nature and forest preservation maps, statistics on the land use (CBS).

Completion of the project: January 1992

Calendar



Preliminary Discussions

Contract signature: Technical and administrative organisation

Selection, processing, restitution of satellite images

Photo-interpretation and quality control

Digitalisation and integration into CORINE data base

Portugal

Contact

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Introduction

First of all, the pilot project has lead to the revision of the nomenclature and the partial revision of the TM data.

It is the only state to have an elaborate validation. This project has stimulated the creation of CNIG.

Team

Supervisor: Ministry of Environment, Lisboa and European Commission

Contractor: Centro Nacional de Informação Geográfica (CNIG, Lisboa)

Administrative Project Manager: Ascenço Pires, Directorate General for Environment, Lisboa

Technical Project Manager: Rui Gonçalves Henriques, CNIG, Lisboa

Processing of the satellite data: Eurosense, Bruxelles, SFERES, Paris

Restitution of false colour images: Eurosense, Bruxelles

Photo-interpretation team:

- Vanda Perdigão, ISA/UTL, Lisboa (supervisor photo-interpreter)
- Miguel Pereira, CNROA, Lisboa
- Ofélia Madureira, IICT, Lisboa
- Regina Albuquerque, IICT, Lisboa
- P. Silva, CNROA, Lisboa

- Ana Fontes, DGF, Lisboa
- Maria Bessa, CNIG, Lisboa
- M. Valentina, CNROA/DGHEA, Lisboa

Digitalisation: Telespazio, Roma

Diffusion of the database: CNIG, Lisboa and European Commission

Technical elements

Surface area: 91708 km²

Projection system: Bessel-Bonne

Number of sheets at the scale of 1/100 000: 53

(more than 2 sheets at the scale of 1/50 000 for Madeira)

Satellite and used sensors: Landsat MSS and TM; SPOT XS for Madeira

Number of scenes covering the state: 8 (Landsat)

Total number of used images: 8 MSS, 4 TM, 2 XS SPOT

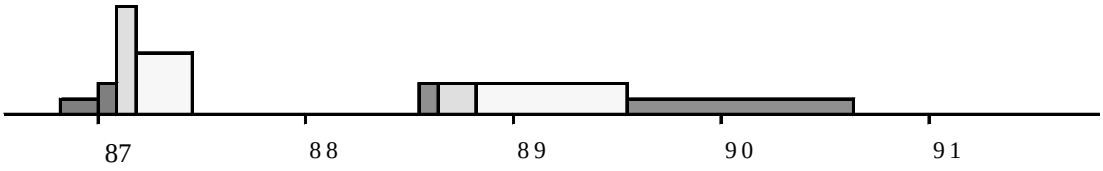
Acquisition period for satellite data: 1985-1987 (from June to August)

Main ancillary data:

Aerial photographs N/B at the scale of 1/15 000, forest inventory cartography at the scale of 1/25 000, Environment Atlas at the scale of 1/1 000 000

Completion of the project: May 1990

Calendar



Preliminary Discussions

Contract signature: Technical and administrative organisation

Selection, processing, restitution of satellite images

Photo-interpretation and quality control

Digitalisation and integration into CORINE data base

United Kingdom

Contact

Robin Fuller

The Institute of Terrestrial Ecology

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Introduction

Northern Ireland (work area I) was realised simultaneously with Ireland. Concerning Great Britain, a land cover use database exists with 25 classes and has been completed in April 1993 by the Institute of Terrestrial Ecology (ITE-Monks Wood). This numerical map with a link of 25 meters has been established with the multidate TM data automatic classification method. A half-automatic conversion of this base to the CORINE standards is undertaken.

Team

*Administrative Project Manager:*Northern Ireland : Michael Brand, Ordnance Survey of Northern Ireland (OSNI, Belfast)

*Technical Project Manager:*Geoffrey 0'Sullivan, Trinity College Dublin (TCD, Dublin)

Photo-interpretation team:

- Roy Tomlinson, School for Earth Sciences QUB, Belfast
- Margaret Cruickshank, School for Earth Sciences QUB, Belfast

Digitalisation: TCD, Dublin; UCD, Dublin; QUB/OSNI, Belfast

Co-ordination: NRDC - TCD, Dublin

*Diffusion of the database:*OSI, Dublin ; OSNI, Belfast and European Commission

Technical elements

Surface area: 240 000 km²

For work area I, see slip: "'Ireland"

Projection system: Transverse Mercator

Number of sheets: 204 at the scale of 1/50 000 (Great Britain)

3 at the scale of 1/100 000 large format (Northern Ireland)

Austria

Contact

Gabriele Sondenegger

Umweltbundesamt

EDV - Umweltinformationssystem

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Introduction

Österreich is the first state having joined voluntarily at the end of the CORINE Land Cover seminary held in February 1992 in Ispra. The photo-interpretation has already started and is foreseen to be completed by the end of 1994. The particularities of the photo-interpretation make a meeting for the Alpine regions necessary.

Team

Supervisor: Ministry of Environment, Wien and European Commission

Contractor: Umweltbundesamt, Wien

Administrative Project Manager: Günter Liebel, Umweltbundesamt, Wien

Technical Project Manager: Peter Aubrecht, Umweltbundesamt, Wien

Processing of satellite data: Joanneym, Wien and Technical University of Wien

Restitution of false colour images: Geospace, Salzburg; Studio Frank

Photo-interpretation team

- Peter Aubrecht, Umweltbundesamt, Wien
  (supervisor photo-interpreter)

Work area I:

- Gabriele Reinberger, Umweltbundesamt, Wien

- Elisabeth Hofer, Umweltbundesamt, Wien
- Walter Heimerl, Umweltbundesamt, Wien

Work area II:

- Wolfgang Wechselberger, Umweltbundesamt, Wien
- Peter Aubrecht, Umweltbundesamt, Wien

Digitalisation: Umweltbundesamt, Wien

Diffusion of the database: Umweltbundesamt, Wien and European Commission

Technical elements

Surface area: 84 000 km²

Projection system: Gauss Krüger

Number of sheets at the scale of 1/100 000 (equivalents): 35 (213 sheets at the scale of 1/50 000)

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 5

Acquisition period for satellite data: 1985 and 1986 (July and August)

Main ancillary data:

Topographic maps at the scale of 1/50 000, work area and infrared at the scale of 1/30 000, vegetation maps.

Completion of the project: December 1996

Sweden

Contact

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Introduction

The information's here below concern the pilot project which is undertaken.

Team

Supervisor: Environmental Protection Agency, Solna
Contractor: Swedish Space Corporation (SSC, Solna)
Administrative Project Manager: Eva Alchrona, SSC, Solna
Technical Project Managers:

- Eva Alchrona (photo-interpretation), SSC, Solna
- Bengt Paulsson (automatic classification), SSC, Solna
- Matsberg (existing information) SSC, Solna

Processing of the satellite data: SSC Satellitbild, Kiruna
Restitution of false colour images: SSC Satellitbild, Kiruna
Photo-interpretation team:
Workarea:

- RebroEva Alchrona, SSC, Solna
- Bengt Paulson, SSC, Solna
- Lars-Erik Gustausson, SSC, Solna*Digitalisation:* SSC, Solna and National Land Survey, Stockholm

Diffusion of the database:

Technical elements

Surface area: 450 000 km²

Projection system: Gauss Kruger

Number of sheets at the scale of 1/100 000: 225 (900 sheets at the scale of 1/50 000)

Satellite and used sensors: Landsat TM

Number of scenes covering the state: 25 (65 nominal scenes)

Acquisition period for satellite data: to be defined.

Main ancillary data:

Topographic maps, economic maps, forest inventory, aerial infrared photographs.

Foreseen completion of the project: to be defined

Finland

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Finnish Environment Institute

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Introduction

A pilot project is undertaken for the West side of the state. It uses already existing numeric databases in order to convert them into the CORINE Land Cover standards.

Team

Supervisor: Finnish Environment Institute (FEI), Helsinki

Administrative Project Manager: Tapani Säynätkari, FEI, Helsinki

Technical Project Manager: Yrjö Sucksdorf, FEI, Helsinki

Treatment of the satellite data: National Land Survey (NLS) and Finnish Forest Research Institute (FFRI), Helsinki

Restitution of false colour images: -

Photo-interpretation team: (automatic classification)

- Yrjö Sucksdorf, NBWE/EDC (supervisor photo-interpreter)
- Kirsi Valanne, FEI
- Olli Jaakkola, Finnish Geodetic Institute (FGI)
- Anders Gyllander, FEI
- Pekka Härma, FEI
- Riitta Teiniranta, FEI

Digitalisation: FEI, Helsinki

Diffusion of the database: FEI, Helsinki

Technical elements

Surface area: 337 000 km²

Projection system: Gauss Krüger (ellipsoid of Hayford)

Number of sheets at the scale of 1/100 000: 342

Satellite and used sensors: Landsat TM

Number of scenes covering the state: ?

Acquisition period for satellite data: 1988-1991(from June to August)

Main ancillary data:

Wetlands database au 1/100 000 and agricultural areas at the scale of 1/50 000, urban settlements database.

Foreseen completion of the pilot project: 1994