

Cultural Heritage and Environmental Impact Assessment in the Planarch Area of North West Europe

Report prepared by

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EXECUTIVE SUMMARY

This report presents the findings of a synthesis of six studies on the role played by cultural heritage issues – particularly archaeology – in environmental impact assessment (EIA) in North West Europe. The research was undertaken by the Planarch 2 partnership covering Belgium (Flanders and Wallonia), France, Germany (Rhineland), the Netherlands and the United Kingdom (England), and supported by the European Union Interreg IIB programme and various national and regional agencies. The report focuses on how current practice relates to international and national legislation and guidance in relation to both EIA and cultural heritage, draws comparisons on the treatment of cultural heritage in the EIA process, and evaluates the role of specialists and the public in the process.

The synthesis is based on a total sample of 428 environmental impact statements (EISs) submitted in the Planarch regions during the period 1997-2004 and covering a wide range of project types. The majority of the EISs were in the infrastructure (30%), extractive industry (15%), and road and rail (12%) project categories, together with plans (10%). The analysis also utilised other relevant documentation, correspondence and findings from consultation and participation. In addition, a more in depth analysis was undertaken of selected case studies to allow more detailed investigation of the approach to assessment of cultural heritage.

The overall findings from the synthesis are considered under three main topics, ‘process’, ‘substance’ and ‘people’, and are used to draw out the major areas of similarity and difference in terms of procedure and practice in the systems evaluated. Recommendations are then proposed to improve practice through ten Guiding Principles for Cultural Heritage in Environmental Impact Assessment.

Cultural heritage is an essential part of sustainability. It is both a non-renewable and valuable resource. Once the evidence of the past has been destroyed, it can never be replaced. Also, it has the potential to increase knowledge and is an excellent vehicle for wider educational objectives. Cultural heritage contributes strongly to people’s sense of place and identity and, more widely, it has important social and economic roles for community development, regeneration, access, leisure and tourism. Such principles are internationally recognised in cultural heritage conventions, and they reflect broader environmental principles which the EIA Directive recognises in requiring coverage of the cultural heritage alongside, and integrated with, other environmental issues.

Despite the existence of common frameworks for both EIA and cultural heritage in European and international directives and conventions, it is clear that different interpretations exist within the countries and regions of North West Europe. Each country has unique systems to deal with EIA and cultural heritage, but nevertheless grapples with similar problems and ultimately seeks to achieve the same outcomes.

The ‘quality’ of treatment of cultural heritage in EISs was broadly positive in England, the Netherlands, Rhineland and Wallonia although variations were apparent. It seems clear that the use of cultural heritage specialists in undertaking the assessments leads to better quality

outputs. The evaluation of how cultural heritage is treated in EIA in North West Europe has indicated some good practice, but also some difficulties. It should be recognised that most of the faults are not peculiar to cultural heritage, but are common to the assessment of other effects covered by the EIA process more generally. The evaluation of magnitude and significance are not always systematic and the treatment of indirect and cumulative impacts remains a problem. The complexity of predicting and evaluating cultural heritage effects, with their inherent uncertainty, contributes to these difficulties. There is also failure to deal with people as receptors, or with historic landscape character, despite recognition of landscape issues at the site level and in policy.

Overall, it seems that cultural heritage has a relatively low status as a factor in EIA in the countries studied. The strong focus of the various conventions and directives on good practice to protect cultural heritage, and the integration of cultural heritage issues in wider planning, seems to have received relatively low attention. A preference in principle for preservation *in situ* has largely been adopted, but the integration of experts into EIA and planning, systematic consultation, and use of properly qualified specialists for assessments have been poorly implemented.

Each of the regional reports made several specific recommendations for improvement of practice within their particular jurisdictions but, more generally, when assessing cultural heritage within EIA procedures, the aim should be to:

- Minimise loss of and avoid adverse impacts on an important aspect of the environment in which we live
- Ensure that cultural heritage is incorporated in spatial planning, social, economic, education and access strategies affecting the study area
- Improve understanding of cultural heritage and the contribution it can make to broader agenda
- Ensure that, where the cultural heritage cannot be preserved, appropriate investigation, recording and communication is undertaken.

Ultimately, the factors most likely to be important in achieving good results are: ensuring appropriate survey, clear understanding of the impacts of development, and a flexible, responsive approach to mitigation. The simple adherence to procedures and merely producing a large volume of paperwork is not enough. The true ethos of a good EIA for the cultural heritage – as for any other aspect of the environment – should thus encapsulate three core characteristics:

- **Rigour** – of research, analysis and assessment
- **Robustness** – of procedures, decisions and implementation
- **Reasonableness** – of obligations on developers and balancing the public interest.

This analysis of EISs from North West Europe indicates that whilst there are problem areas in the assessment of effects on cultural heritage, there are also instances of good practice. In addition, the regions and countries involved share many common problems. The study provides a basis for future work in improving the treatment of cultural heritage in EIA, and in the rapidly developing field of SEA, in particular through the Guiding Principles for Cultural Heritage in EIA.

SAMENVATTING

Dit rapport bevat de resultaten van zes onderzoeken naar de rol van cultureel erfgoed – in het bijzonder archeologie – bij milieueffectrapportage (m.e.r.) in Noordwest-Europa. Het onderzoek is verricht door de Planarch2-partners: België (Vlaanderen en Wallonië), Frankrijk, Duitsland (Rijnland), Nederland en het Verenigd Koninkrijk (Engeland), met steun van het Interreg IIIB-programma van de Europese Unie en verschillende nationale en regionale instanties. In het onderliggende rapport wordt vooral aandacht besteed aan de manier waarop de huidige uitvoeringspraktijk zich verhoudt tot internationale en nationale wet- en regelgeving ten aanzien van m.e.r. en van cultureel erfgoed. Tevens worden vergelijkingen getrokken waar het gaat om de omgang met cultureel erfgoed in het m.e.r.-proces, en wordt de rol van specialisten en het publiek in dit proces geëvalueerd.

De synthese is gebaseerd op een steekproef van in totaal 428 milieueffectrapporten (MER's) die in de Planarch-regio's in de periode 1997-2004 zijn ingediend voor een breed scala aan soorten projecten. De meeste MER's hadden betrekking op de infrastructuur (30%), bedrijven die grondstoffen winnen (15%), (spoor)wegprojecten (12%) en ruimtelijke plannen (10%). Voor de analyse is verder gebruik gemaakt van andere relevante documentatie, correspondentie en resultaten van overleg en participatie. Daarnaast is een meer diepgaande analyse verricht van bepaalde casestudies om gedetailleerder onderzoek naar de omgang met cultureel erfgoed mogelijk te maken.

De eindconclusies uit de synthese komen aan de orde in drie hoofdonderwerpen: "proces", "inhoud" en "mensen". Zij worden gebruikt om de belangrijkste overeenkomsten en verschillen van de geëvalueerde systemen in kaart te brengen in termen van procedures en praktijkgebruiken. Vervolgens worden aanbevelingen gedaan om de uitvoeringspraktijk te verbeteren aan de hand van tien 'Richtlijnen voor Cultureel Erfgoed bij Milieueffectrapportage'.

Cultureel erfgoed is een essentieel onderdeel van duurzaamheid. Het is een waardevolle schat, die niet vernieuwd kan worden: als de sporen uit het verleden eenmaal vernietigd zijn, is het onmogelijk ze te vervangen. Cultureel erfgoed kan bovendien onze kennis vergroten en is daarom een uitstekend instrument voor bredere onderwijsdoelstellingen. Cultureel erfgoed draagt in hoge mate bij aan het gevoel van plaats en identiteit van mensen, en heeft in ruimere zin belangrijke sociale en economische functies voor de ontwikkeling van de gemeenschap, herleving, toegankelijkheid, vrije tijd en toerisme. Deze principes worden internationaal erkend in afspraken over cultureel erfgoed en ze weerspiegelen bredere milieuprincipes uit de EU-richtlijn m.e.r. die vereist dat cultureel erfgoed naast en in combinatie met andere milieukwesties wordt meegenomen bij beslissingen.

Ondanks het bestaan van gemeenschappelijke kaders voor zowel m.e.r. als cultureel erfgoed in Europese en internationale richtlijnen en afspraken, is het duidelijk dat er binnen de landen en regio's in Noordwest-Europa verschillende interpretaties bestaan. Hoewel elk land een eigen systeem heeft voor het hanteren van m.e.r. en cultureel erfgoed, worstelen alle landen met vergelijkbare problemen, en streven ze uiteindelijk naar dezelfde resultaten.

De "kwaliteit" van het omgaan met cultureel erfgoed in MER's was positief in Engeland, Nederland, het Rijnland en Wallonië, hoewel er duidelijke verschillen waren. Het inschakelen van specialisten op het gebied van cultureel erfgoed bij de rapportages lijkt duidelijk tot een kwalitatief betere uitkomst te leiden. De evaluatie van de omgang met cultureel erfgoed bij m.e.r. in Noordwest-Europa, laat een goede uitvoeringspraktijk zien, maar ook enkele moeilijkheden. Erkend moet worden dat de meeste fouten niet specifiek zijn voor cultureel erfgoed, maar ook gelden voor de beoordeling van andere effecten waarop het m.e.r.-proces van toepassing is. De evaluatie van belang en waardering gebeurt niet altijd systematisch, en de behandeling van indirecte en cumulatieve effecten blijft problematisch. De complexiteit van het voorspellen en evalueren van effecten op het cultureel erfgoed met de daaraan gekoppelde onzekerheid, draagt bij aan de moeilijkheden. Er wordt gefaald waar het gaat om omgaan met mensen als ontvangers of met historische landschapkenmerken, hoezeer men op lokaal niveau en in het beleid landschappelijke vraagstukken ook erkent.

Over het algemeen heeft cultureel erfgoed in de onderzochte landen een relatief lage status als factor bij m.e.r. Er lijkt relatief weinig aandacht voor de sterke focus van verschillende afspraken en richtlijnen ter bescherming van cultureel erfgoed, en voor het integreren van kwesties met betrekking tot cultureel erfgoed in een bredere ruimtelijke ontwikkeling. Er bestaat veelal een principiële voorkeur voor behoud *in situ*, maar het inschakelen van deskundigen bij m.e.r. en ruimtelijke ontwikkelingen, systematische advisering en de inzet van gekwalificeerde specialisten bij beoordelingen blijft achterwege.

In elk van de regionale rapporten worden specifieke aanbevelingen gedaan voor verbetering van de praktijk binnen de specifieke rechtsgebieden, maar meer in het algemeen moet bij het beoordelen van het cultureel erfgoed binnen m.e.r.-procedures worden beoogd:

- het verlies van een belangrijk aspect van de omgeving waarin wij leven tot een minimum te beperken en de nadelige effecten op onze omgeving te vermijden;
- ervoor te zorgen dat cultureel erfgoed deel uitmaakt van ruimtelijke ordening, sociale, economische, en openstelling- en onderwijsstrategieën die van invloed zijn op het onderzoeksgebied;
- het inzicht te verbeteren in cultureel erfgoed en de bijdrage die het kan leveren aan een bredere agenda;
- ervoor te zorgen dat, daar waar cultureel erfgoed niet behouden kan blijven, werk wordt gemaakt van adequaat onderzoek, verslaggeving en communicatie.

Uiteindelijk zijn de factoren die belangrijk zijn voor het behalen van goede resultaten: adequaat onderzoek, helder inzicht in de effecten van ontwikkeling, en een flexibele en slagvaardige benadering van mitigatie. Simpelweg de procedures naleven en vervolgens een lijvig rapport afleveren is niet voldoende. Een voor het cultureel erfgoed, en overigens voor elk ander aspect van het milieu, goede m.e.r. bevat drie hoofdkenmerken:

- **nauwkeurigheid** – van onderzoek, analyse en beoordeling;
- **robuustheid** – van procedures, besluiten en implementatie;
- **redelijkheid** – van verplichtingen voor ontwikkelaars en bij de afweging van het openbaar belang.

Uit deze analyse van MER's uit Noordwest-Europa blijkt dat er, hoewel er probleemgebieden zijn bij het beoordelen van de effecten op cultureel erfgoed, ook goede praktijkvoorbeelden

zijn. Daarnaast kampen de betrokken regio's en landen veel met dezelfde problemen. Dit onderzoek biedt een basis voor toekomstig werk ter verbetering van de behandeling van cultureel erfgoed bij m.e.r. en biedt een leidraad voor het zich snel ontwikkelende terrein van de Strategische Milieubeoordeling (SMB), in het bijzonder door de 'Richtlijnen voor Cultureel Erfgoed bij Milieueffectrapportage'

Résumé

Ce rapport expose la synthèse de six études consacrées à la façon dont le patrimoine culturel – particulièrement archéologique- est pris en compte dans les études d'incidences/études d'impacts dans le nord-ouest de l'Europe. La recherche a été entreprise par les partenaires du projet Planarch 2 couvrant l'Allemagne (la Rhénanie), la Belgique (Flandres et Wallonie), la France, les Pays-Bas et le Royaume-Uni (Angleterre) et est soutenue par le programme Interreg IIIB de l'Union européenne ainsi que par différentes institutions nationales et régionales. Le rapport analyse les pratiques en matière d'études d'incidences/ études d'impacts et de patrimoine culturel et leur articulation avec la législation et les directives nationales et internationales, dresse des comparaisons sur le traitement du patrimoine culturel dans le processus des études d'incidences/ études d'impacts et apprécie (mesure) le rôle joué par les spécialistes et le public dans ce même processus.

La synthèse est fondée sur un échantillonnage de 424 dossiers d'études d'incidences/ études d'impacts, touchant le territoire visé par le projet Planarch, couvrant la période de 1997 à 2004 et portant sur un large éventail de types de projets. La majorité des dossiers concerne les infrastructures (30%), l'industrie extractive (15%), les routes, les chemins de fer (12%) et les aménagements (10%).

L'analyse a aussi utilisé la documentation diverse et variée issue des consultations et échanges. En outre, une analyse plus approfondie a été réalisée en faveur de certains cas précis afin de permettre une enquête plus détaillée à propos de l'évaluation du patrimoine culturel.

Les conclusions générales de la synthèse sont abordées selon trois thèmes principaux : « le processus », « le fond » et « la population » qui ont servi à mettre en évidence les similarités et les différences en termes de procédure et de pratique.

Des recommandations sont proposées afin d'améliorer la pratique à travers les dix « Recommandations pour le Patrimoine culturel dans le cadre des études d'incidences/ études d'impacts ».

Le patrimoine culturel constitue une part essentielle du développement durable. C'est une ressource à la fois non renouvelable et précieuse. Une fois détruits, les vestiges du passé disparaissent à jamais. Le patrimoine culturel détient le potentiel qui permet d'accroître la connaissance et constitue aussi un excellent moyen d'éducation. Il contribue à consolider le sentiment d'appartenance et d'identité de la population. Plus largement il joue un rôle social et économique important pour le développement public, la revitalisation, l'accessibilité, les loisirs et le tourisme. De tels principes sont reconnus sur le plan international dans les conventions concernant le patrimoine culturel et ils reflètent des principes environnementaux plus larges que la Directive en matière d'études d'incidences/ études d'impacts reconnaît dans les points nécessaires à aborder en matière de patrimoine culturel et intègre aux autres questions environnementales.

Malgré l'existence d'un socle commun en matière d'études d'incidences/ études d'impacts et de patrimoine culturel dans les directives européennes et internationales, il est évident que des interprétations variées existent au sein des états et régions du nord-ouest de l'Europe. Chaque état dispose d'un propre système d'intégration du patrimoine culturel dans la réglementation, tout en étant néanmoins confronté à des problèmes similaires et en recherchant finalement à atteindre les mêmes résultats.

La qualité du traitement du patrimoine culturel dans les études d'incidences/ études d'impacts est largement positive en Angleterre, en Rhénanie, aux Pays-Bas, en Wallonie et en France, bien qu'il existe d'incontestables variantes. Il semble évident que l'intervention de spécialistes en matière de patrimoine culturel dans le cadre de l'évaluation aboutit à des meilleurs résultats. L'examen de la manière dont le patrimoine culturel est traité dans les études d'incidences dans le nord-ouest de l'Europe a indiqué une assez bonne pratique, mais aussi quelques difficultés. Il faut reconnaître que la plupart des manquements ne sont

pas spécifiquement liés au patrimoine culturel mais touchent aussi d'autres domaines couverts par le processus des études d'incidences/ études d'impacts. L'évaluation de l'importance et de la portée des effets n'est pas toujours systématique et le traitement des impacts indirects et cumulatifs demeure un problème.

Le caractère incertain de l'estimation et de l'évaluation des conséquences sur le patrimoine culturel contribue à ces difficultés. Il y a aussi une déficience dans la prise en considération de la population comme interlocuteur, ou dans la caractérisation des paysages historiques, malgré la reconnaissance de la problématique du paysage au niveau du site et de la réglementation.

Au sein des états étudiés, il semble que le patrimoine culturel bénéficie globalement d'un statut encore modeste en tant que facteur dans les études d'incidences.

La prise en considération des différentes Conventions et Directives concernant la protection du patrimoine culturel ainsi que l'insertion de cette problématique dans une planification plus large ne semblent pas retenir une très large attention. Une préférence à la conservation *in situ* a été largement adoptée mais l'intégration d'experts au sein des études d'incidences/ études d'impacts et de la planification, leur consultation systématique, ainsi que l'intervention de spécialistes au niveau des évaluations ont été faiblement introduites.

Chacun des rapports régionaux établit des recommandations visant à améliorer la pratique au regard de ses juridictions propres mais plus généralement, l'évaluation du patrimoine culturel au sein des procédures d'études d'incidences devrait viser à :

- restreindre les dégâts et éviter les altérations de cette composante importante de l'environnement;
- s'assurer que le patrimoine culturel fait partie intégrante de l'aménagement territorial, ainsi que des programmes sociaux, économiques et éducatifs de la zone concernée;
- améliorer la compréhension du patrimoine culturel, par son intégration dans des programmes élargis;
- s'assurer que, lorsque le patrimoine archéologique ne peut être sauvegardé, des mesures appropriées soient prises pour, l'enregistrer, l'étudier et le faire connaître.

Enfin, les éléments probablement les plus importants au niveau des résultats sont : réussir à obtenir une prospection adaptée ; une compréhension claire des effets de l'aménagement, et une approche réceptive à l'alternative.

La simple adhésion aux procédures ainsi que la production de paperasseries ne suffisent pas. La vraie intelligence d'une bonne étude d'incidences/ études d'impacts pour le patrimoine culturel – comme pour les autres aspects de l'environnement – devrait donc se résumer en trois caractéristiques principales:

Rigueur de la recherche, de l'analyse et de l'évaluation

Fermeté des procédures, des décisions et de la mise en œuvre

Raisonnement équilibrer les obligations des aménageurs et l'intérêt du public (Application du principe de proportionnalité)

Cette analyse des études d'incidences/études d'impacts du nord-ouest de l'Europe atteste du fait qu'il existe non seulement des problèmes liés à l'évaluation des effets de l'aménagement sur le patrimoine culturel mais qu'il se trouve aussi des cas de bonne pratique.

En outre, les régions et les pays impliqués dans l'étude partagent de nombreux problèmes communs. L'étude fournit la base d'un travail futur destiné à l'amélioration du traitement du patrimoine culturel dans les études d'incidences/études d'impacts, et dans le rapide développement des études environnementales stratégiques (EES), en particulier grâce aux dix « Recommandations pour le patrimoine culturel dans les études d'incidences/études d'impacts ».

ZUSAMMENFASSUNG

Dieser Bericht beschreibt die Ergebnisse einer Auswertung von sechs Untersuchungen, die sich mit dem kulturellen Erbe – insbesondere der Archäologie – in der Umweltverträglichkeitsprüfung (UVP) in Nordwest Europa befassten. Die Untersuchungen erfolgten durch die Partner im Planarch 2-Projekt, namentlich Belgien (Flandern und Wallonien), Frankreich, Deutschland (Rheinland), die Niederlande und das Vereinigte Königreich (England); unterstützt wurde das Projekt durch die Europäische Union im Rahmen des Interreg IIIB-Programms und durch verschiedene nationale und regionale Institutionen. Der Bericht stellt die aktuelle Planungspraxis vor dem Hintergrund internationaler und nationaler Gesetzgebung sowie entsprechender Vorgaben in Bezug sowohl auf die UVP als auch auf das kulturelle Erbe dar und beurteilt die Rolle von Fachbehörden sowie die der Öffentlichkeit in den Planungsverfahren.

Die Auswertung basiert auf insgesamt 428 ausgewählten Umweltverträglichkeitsstudien bzw. Umweltberichten, die im Zuständigkeitsbereich der Planarch-Partner während der Zeit von 1997 bis 2004 erstellt wurden, und ein breites Spektrum von Projekt-Arten umfassen. Der größte Teil der Umweltverträglichkeitsstudien (UVS) bzw. Umweltberichte befasste sich mit Infrastrukturvorhaben (30 %), mit der Genehmigung von Industrieanlagen (15 %), mit Straßen- und Eisenbahnprojekten (12 %) sowie mit Plänen oder Programmen (10 %). Die Untersuchung berücksichtigte neben den Umweltverträglichkeitsstudien und Umweltberichten auch andere für die Planungs- und Genehmigungsverfahren relevante Dokumente, Schriftverkehr und Protokolle über Besprechungen, Abstimmungen und die Öffentlichkeitsbeteiligung. Zusätzlich wurden ausgewählte Fallstudien einer sehr detaillierten Analyse unterzogen, um ausführlichere Informationen zur Berücksichtigung der Auswirkungen der Vorhaben auf das kulturelle Erbes zu erhalten.

Die Ergebnisse werden im Überblick unter drei Hauptaspekten betrachtet: „Planungsprozess“, „Inhaltliche Qualität“ und „Planungsbeteiligte“; so werden die wesentlichen Übereinstimmungen und Unterschiede in Bezug auf Verfahren und Praxis der untersuchten Planungssysteme herausgearbeitet. Es werden zehn Grundsätze formuliert, um die Praxis des Umgangs mit dem kulturellen Erbe in der UVP zu verbessern.

Das kulturelle Erbe ist ein essenzieller Bestandteil von Nachhaltigkeit. Es ist ein nicht erneuerbares und gleichzeitig ein wertvolles Schutzgut. Wenn Zeugnisse der Vergangenheit erst einmal zerstört worden sind, können sie nicht mehr ersetzt werden. Außerdem ist das kulturelle Erbe potenzielle Quelle von Wissen und es ist ein ausgezeichnetes Instrument zur Unterstützung von Bildungs- und Erziehungsaufgaben. Das kulturelle Erbe ist Träger von Raumempfinden und regionaler Identität und es spielt eine wichtige soziale und wirtschaftliche Rolle für die gesellschaftliche Entwicklung, für Erholung, Freizeit und Tourismus. Diese Grundsätze sind international in Konventionen über das kulturelle Erbe anerkannt und aufgenommen worden; sie korrespondieren im weiteren Sinne mit umweltpolitischen Grundsätzen, die die UVP-Richtlinie der EU durch die Forderung der Einbeziehung des kulturellen Erbes in die Umweltprüfung anerkennt und sie mit anderen Umweltaspekten in die Umweltprüfung integriert.

Trotz des Bestehens von gemeinsamen Vorgaben sowohl für die UVP als auch das kulturelle Erbe in europäischen Richtlinien und Konventionen ist es naheliegend, dass unterschiedliche Auslegungen in den Ländern und Regionen Nordwest Europas existieren. Jedes Land hat eigene Regeln zur Anwendung der UVP und zum Umgang mit dem kulturellen Erbe, aber trotzdem vergleichbare Probleme zu meistern, um letztendlich ähnliche Ergebnisse bei der Anwendung der Vorgaben zu erzielen.

Die „Qualität“ der Berücksichtigung des kulturellen Erbes in Umweltverträglichkeitsuntersuchungen war – bei allen Unterschieden - positiv in England, in den Niederlanden, im Rheinland und Wallonien. Es ist verständlich, dass die Einbeziehung von Experten auf dem Gebiet des kulturellen Erbes (Fachämter für Denkmalpflege) zu qualitativ besseren Bewertungsergebnissen führt. Die Überprüfung, wie das kulturelle Erbe in den Umweltverträglichkeitsuntersuchungen in Nordwest Europa behandelt worden ist, hat einige gute Beispiele, aber auch deutliche Schwächen gezeigt. Es ist festzuhalten, dass die meisten Defizite nicht spezifisch in Bezug auf das kulturelle Erbe auftreten, sondern mit der generellen Bewertung von Umweltauswirkungen zusammenhängen, die durch die UVP beschrieben werden. Die Einschätzung der Eingriffserheblichkeit und der Bedeutung der Schutzgüter sind nicht immer systematisch durchgeführt worden und die Behandlung von indirekten und kumulativen Auswirkungen ist nach wie vor unbefriedigend. Die Schwierigkeit, Auswirkungen auf das kulturelle Erbe vorherzusagen und auch zu dokumentieren, verbunden mit der ihr anhaftenden Ungewissheit, trägt zu diesen Schwächen bei. Deutliche Schwächen zeigt der Umgang mit Betroffenen oder der Umgang mit der historischen Landschaft als Ganzes, trotz der Wertschätzung für Belange der Landschaft im Allgemeinen vor Ort und in der Politik.

Es hat sich im Allgemeinen gezeigt, dass das kulturelle Erbe in den betrachteten Ländern einen relativ niedrigen Status innerhalb der UVP hat. Der starke Fokus der verschiedenen Konventionen und Direktiven auf eine gute fachliche Praxis im Hinblick auf dem Schutz des kulturellen Erbes und auf eine umfassende Einbeziehung des kulturellen Erbes in die Planung scheinen kaum Beachtung zu finden. Eine Präferenz des Grundsatzes, das kulturelle Erbe in situ zu erhalten ist inzwischen erkennbar, aber die Einbeziehung von Fachwissen in die UVP und Planungsprozesse, die systematische Konsultation und der Einsetzen von adäquat qualifizierten Spezialisten zur Bewertung der Auswirkungen auf das kulturelle Erbe sind eher mangelhaft umgesetzt worden.

In jedem der regionalen Berichte werden verschiedene spezifische Vorschläge zur Verbesserung der Praxis im jeweiligen Zuständigkeitsbereich formuliert, aber generell sind bei der Berücksichtigung des kulturellen Erbes in der UVP folgende Ziele zu beachten:

- Minimierung der Verluste und das Vermeiden von nachteiligen Auswirkungen auf einen wichtigen Aspekt unserer Umwelt, in der wir leben
- Gewährleistung, dass das kulturelle Erbe als eigenständiger Belang in die räumliche Planung integriert wird, und dass es bei sozialen und wirtschaftlichen sowie bei Fragen der Bildung und der regionalen Identität, die den Untersuchungsraum betreffen, Gegenstand der Betrachtung ist

- Verbesserung des Verständnisses für das kulturelle Erbe und Vergrößerung der Akzeptanz, dass das kulturelle Erbe planerische Entscheidungen und das tägliche Handeln mit bestimmen
- Gewährleistung, dass eine adäquate Untersuchung, Dokumentation und Präsentation zu erfolgen hat, wenn das kulturelle Erbe nicht in situ erhalten werden kann.

Letztendlich sind folgende Aspekte relevant, um gute Ergebnisse zu erzielen: Gewährleistung von adäquaten Untersuchungen (Prospektion), klare Darstellung aller Auswirkungen eines Vorhabens oder einer Planung und kreative, interaktive Anstrengungen zur Vermeidung von Eingriffen in das kulturelle Erbe. Eine formell korrekte Verfahrensabwicklung und die Produktion von viel Papier sind nicht ausreichend. Die Beurteilungsgrundlage bezüglich des kulturellen Erbes in der UVP – wie für alle anderen Umwelt-Schutzgüter, muss sich auf drei Kernpunkten stützen:

- **Gründlichkeit** – der Erhebung, Analyse und Bewertung
- **Nachvollziehbarkeit** – der Verfahren, Entscheidungsfindung und Umsetzung
- **Verhältnismäßigkeit** – der Auflagen an Planer und Abwägung der öffentlichen Belange.

Die Auswertung von Umweltverträglichkeitsstudien und Umweltberichten aus Nordwest Europa zeigt, dass es Schwierigkeiten bezüglich der Beurteilung von Auswirkungen auf das kulturelle Erbe gibt, aber es gibt zugleich auch Beispiele für eine gute Praxis. Darüber hinaus haben die beteiligten Regionen und Länder vergleichbare Probleme. Die Untersuchung bildet eine gute Basis, zukünftig die Berücksichtigung des kulturellen Erbes in der UVP und im sich schnell entwickelnden Bereich der Strategischen Umweltprüfung zu verbessern, insbesondere durch die Grundsätze zum kulturellen Erbe in der UVP.

GLOSSARY

The study highlighted different interpretations and uses of terms relating to the EIA process, to cultural heritage and archaeology, as well as those specific to the regions/countries of North West Europe. This glossary therefore provides definitions of key terms used in the report.

Specialist – organisation or individual qualified by education and/or experience to practise professionally in the cultural heritage field.

Baseline – the description of the existing state of the environment.

Belvedere philosophy / Belvedere Memorandum – The Belvedere Memorandum, presents a vision regarding the way in which the cultural-historic qualities of the physical environment can and should be addressed during future spatial interventions in the Netherlands.

Competent authority – the public body with statutory authority and responsibility for ensuring the correct application of EIA regulations in respect of an individual project, including evaluating the proposal using the EIS, making the decision on whether it should be implemented and what mitigation measures should be undertaken.

Cultural heritage – all those remains and remembrances which link us to our past, whether in the landscape around us or in the arts, languages or traditions. It helps us to understand long term social and environmental change. In the context of EIA it includes physical remains of the past – historic buildings and structures, archaeological sites and monuments, artefacts, palaeo-environmental deposits, historic landscapes and townscapes, and marine heritage.

Cumulative effect – the result of two or more separate environmental impacts acting in combination to produce additional effects.

Deposit modelling – the process of arranging systematically all known information regarding deposits of a presumed distinctive type, and their environments, in order to define and describe their essential attributes including mapping their extent.

Designation – statutory protection given to a cultural heritage or other environmental asset.

Desk study – the survey and analysis of published and other existing information relating to an area, site or structure.

Diagnosis – a term particularly used in France to cover the ensemble of desktop, survey, sampling and fieldwork assessments (including trial-trenching) undertaken as part of 'preventive archaeology' (cf. 'preventive archaeology' below) to detect archaeological occurrences, to locate their position and extent, and to identify their nature and characteristics.

Environment – the context in which humans live, encompassing both natural (such as air, water, climate, geology and biodiversity) and societal (land use, transport, waste, economic and cultural landscape) elements.

Environmental impact assessment (EIA) – the statutory assessment of the effects of certain public and private projects on the environment prior to deciding on their implementation.

Environmental impact statement (EIS) or environmental statement (ES) – the document that presents information on the completed environmental impact assessment study and its conclusions. In this report EIS is used throughout.

Ex ante – in EIA, the predictive assessment of the environmental effects of an action before it takes place. *Ex ante* assessment is the standard model for statutory national EIA systems within the EU and internationally. An alternative, *ex post*, approach, conducts the assessment of effects using evidence collected after the action has been implemented.

Expert – organisation or individual with statutory role in protection of cultural heritage.

Fieldwalking – the systematic collection of objects from the surface of ploughed fields.

Geophysics, geo-physical surveys – techniques, including electrical resistivity, magnetometry and ground-penetrating radar, which can locate buried features without disturbing them.

Historic environment – physical components of the environment that reflect past human activity.

Historic Landscape Characterisation – the mapping of surviving historic features in the present landscape to provide an overview of its development

Impacts (effects) – changes to the environment caused by human actions.

Intrusive evaluation – archaeological investigations that involve physical disturbance of the ground.

Landscape - means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors

Magnitude of effects – the determination of the size of an environmental impact.

Mitigation – measures to avoid, reduce, remedy or offset adverse environmental effects.

Monitoring – continuing or periodical measurement before, during and after development, to test the accuracy of the findings of the EIS, to check that mitigation measures are correctly carried out and to identify significant unforeseen effects.

Monument – a site, feature or structure of historic interest or importance.

Non-intrusive evaluation – systematic field surveys that do not cause physical disturbance (see text page 26 – 27).

Palaeo-environmental – relating to the reconstruction of past environmental conditions from deposits associated with datable archaeological material.

Preventive archaeology – (from French, *archéologie préventive*) Investigations governed by the broader scientific principles and objectives of archaeological research, aimed at ensuring the detection and evaluation (cf. 'diagnosis'), and subsequently the preservation by study, of those elements of the archaeological heritage affected or likely to be affected by development works.

Preservation in situ – the preservation of historic features in their original condition and location.

Public participation – the formal engagement of members of the community in the EIA process, including the statutory right to submit comments on the content of the EIS and to have those comments taken into account in decision-making.

Rescue archaeology – investigations to 'rescue' knowledge before or during its destruction through development.

Risk assessment – a technique for estimating the probability and severity of harm being caused to the environment or human health by a known environmental hazard.

Scoping – the determination of the range of topics to be covered by an EIA and the extent of, and methods to be used in, the detailed impact assessment studies.

Scientific – Describing collectively elaborated methods, standards and procedures explicitly and systematically applied following research programmes and objectives in order to gain new knowledge and better understanding of (in the case of archaeology) past human societies, their history, culture and environment.

Screening – the determination of whether or not EIA is necessary for a particular development proposal.

Setting – the physical surroundings of an historic site, monument or structure that affect how it is perceived, appreciated and understood.

- Significance of effects* – the assessment of how important an environmental effect is, taking into account the magnitude of the impact and the intrinsic quality of the environment.
- Site* – a place in which evidence of past activity is preserved and which is subject to archaeological investigation.
- Strategic environmental assessment (SEA)* – the statutory requirement for the assessment of the effects of certain public plans and programmes on the environment prior to their implementation.
- Sustainable development* – defined by *Our Common Future* (also known as the Brundtland Report, 1987) as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.
- Walkover survey* – a systematic visual inspection of a site to identify features or characteristics of historic or archaeological interest.
- Watching brief* – the on-site monitoring of construction work by archaeologists to enable prompt investigation and recording of features of interest that may be uncovered.

1. INTRODUCTION

Cultural heritage embraces all those remains and remembrances which link us to our past, whether in the landscape around us or in the arts, languages or traditions. It helps us to understand long term social and environmental change. In the context of EIA it includes physical remains of the past – historic buildings and structures, archaeological sites and monuments, artefacts, palaeo-environmental deposits, historic landscapes and townscapes, and marine heritage.

North West Europe has a rich cultural heritage which ranges from the appearance of humanity in the region some 800,000 years ago up to the present day. This is a transnational heritage which generally does not recognise the boundaries of modern political geography but rather is a “*source of European collective memory*” (‘Valetta Convention’ – Council of Europe, 1992). In recent years the increasing pressure of development, the modernisation of farming techniques and the impact of natural processes (heightened by global warming and the lack of integrated management of coasts, rivers and estuaries) have substantially accelerated the threat to this heritage.

This report presents the results of a survey of cultural heritage coverage in Environmental Impact Assessment (EIA) within North West Europe carried out by the Planarch partnership¹ supported by the European Regional Development Fund Interreg IIIB programme.

Cultural heritage is an essential part of sustainable development and there is a need to identify what is important about the historic environment and manage it in a sustainable manner for the benefit of present and future generations. In a European context this means establishing value at a local, regional, national and transnational level.

In contrast to other environmental issues (water, air, soils, habitats and species), there are no European Union (EU) directives covering cultural heritage and in particular the historic environment. Nonetheless, cultural heritage has been accorded weight in national legislation and planning guidance. Additionally, the inclusion of cultural heritage in Environmental Impact Assessment and Strategic Environmental Assessment (SEA) requirements means it is becoming better recognised as an important aspect of sustainable development (Lambrick

¹*Belgium* - Vlaams Instituut voor het Onroerend Erfgoed – VIOE/Flemish Institute for Archaeological Heritage; Universiteit Gent/Ghent University; Ministère de la Région Wallonne -Direction du Hainaut - Service de l'Archéologie/Ministry of the Walloon Region, Hainaut Province Archaeology Service
France - Institut National de Recherches Archéologiques Préventives – INRAP/National Research Institute for Preventive Archaeology
Germany - Landschaftsverband Rheinland - Rheinisches Amt für Bodendenkmalpflege - RAB/Archaeological State Service in the Rhineland
Netherlands - Rijksdienst voor het Oudheidkundig Bodemonderzoek ROB/Dutch National Service for Archaeological Heritage
UK - Kent County Council (Lead Partner); Essex County Council

and Hind, 2005, p.4). The *ex ante* assessment of the potential environmental effects of development, and development-related processes, is becoming increasingly fundamental to the spatial planning process. In the European Union, the directives for Environmental Impact Assessment (85/337/EEC – European Commission (EC), 1985; 97/11/EC - EC, 1997) and Strategic Environmental Assessment (2001/42/EC - EC, 2001) provide a framework within which member countries must develop their own systems for achieving the set objectives. Cultural heritage is listed as one of the issues to be addressed in such assessments.

1.1 Planarch

The Planarch partnership focuses on North West Europe and includes organisations from Belgium, France, Germany, the Netherlands and the United Kingdom (UK). While the main focus of this study relating to EIA is the archaeological heritage, many aspects also consider the wider cultural heritage. The Planarch partners have as a major aim the better integration of cultural heritage in spatial planning and the development of methodologies and systems of value, which will lead to more cost effective management of cultural heritage both in the individual regions and across the partnership area as a whole.

The first Planarch project (1999-2002), supported by the European Interreg IIC programme, demonstrated clearly the advantage of a transnational approach to management of the archaeological resource. This project involved the development of an understanding of the legal and organisational frameworks for dealing with archaeology, followed by joint work on specific issues relating to the integration of archaeology within the planning process.

The second Planarch project – ‘Planarch 2’ (2003-2006) – has been supported by the European Union Interreg IIIB programme and various national and regional agencies.

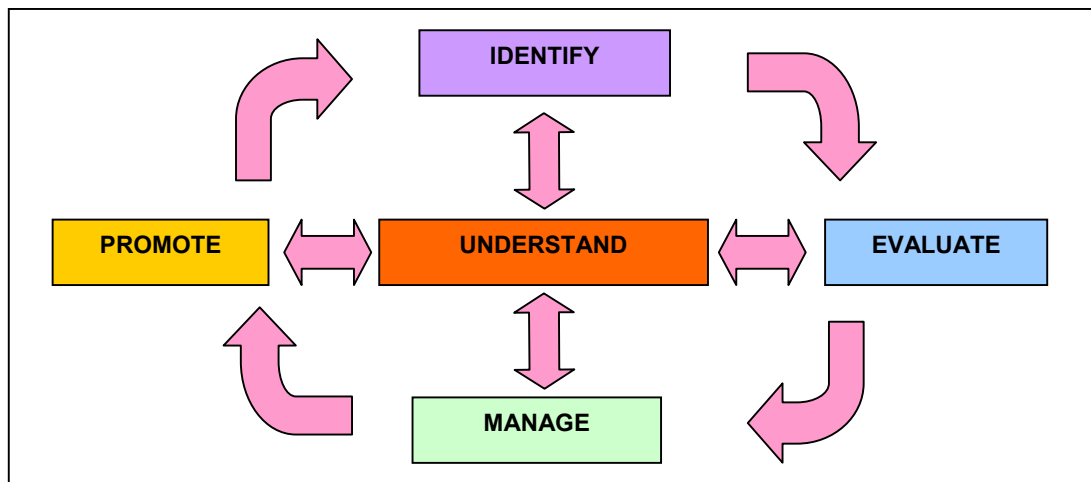
The four main objectives of Planarch 2 are to:

1. Identify and record aspects of the common cultural heritage resource of North West Europe
2. Develop strategies within the spatial planning process to assess and establish the value of the cultural heritage
3. Develop strategies within the spatial planning process to preserve and protect the cultural heritage resource of North West Europe
4. Promote the cultural heritage of North West Europe.

The key to developing and applying appropriate approaches to cultural heritage involves ‘understanding’, whether at an academic level or in terms of a sensitive feeling of attachment

or ownership. While understanding informs any action, there is a cycle of activities involving identifying, evaluating, managing and promoting which must underpin any strategy (Figure 1).

Figure 1: Fundamental concepts of the Planarch 2 study



Planarch 2 Activity Area 3 (Management) contains three Action Areas, including Action 3A on EIA and SEA Cultural Heritage components. Action 3A comprises a review of current practice of EIA in relation to cultural heritage, particularly archaeology, across the partner regions leading to recommendations for improving best practice in EIA and SEA. The two phases of this action comprise Phase 1, regional/country studies, and Phase 2, the synthesis.

1.2 Phase 1 – regional studies

The 'Brief' for Phase 1 of the Planarch 2 study required each individual regional/country review to gather information and data to fulfil the following objectives:

- Provide an overview of the EIA process
- Indicate the level of EIA activity in terms of numbers and types of projects
- Review selected EISs in order to evaluate the quality of assessment of cultural heritage.

Thus, each study followed a common framework to allow synthesis of the findings (see Section 1.3) across the North West Europe region. However, due to differences in legislation, etc., it was not feasible for the Phase 1 brief to be followed to the same degree of detail and specificity for each region. Therefore, detailed coverage of EIA activity and practice in the assessment of effects on archaeology and wider cultural heritage is only available for England, the Netherlands, Rhineland and Wallonia, with the studies from Flanders and France providing background and supporting information.

The main focus of the Phase 1 studies was on EIA at the project level, and concentrated on specific approaches to the assessment of effects on archaeology and cultural heritage. The term EIA was used to refer to the whole EIA process from initial screening, through assessment, implementation of the project and subsequent monitoring of mitigation. Where possible, the regional studies also took account of the European Commission SEA Directive (2001/42/EC), scheduled for implementation in July 2004. The brief required consideration of any implications for assessment at a more strategic level or any lessons that might be learned from EIA practice. Although the relatively recent implementation of this Directive (running into 2005 for many countries) led to SEA receiving less focus in the Planarch study than initially hoped, nevertheless the principles developed through this study will be applicable to SEA.

The six reports from the Phase 1 regional studies are referenced in Section 7.1, and the documents can be accessed through the Planarch website (www.planarch.org).

1.3 Phase 2 - synthesis

In the second phase, the individual regional/country reviews from Phase 1 were drawn together, to provide a broader representation of procedures and practice across North West Europe. The Phase 2 synthesis was undertaken by a team led by the EIA Centre at the University of Manchester, supported by George Lambrick Archaeology and Heritage Consultancy and the University of Koblenz.

The synthesis drew on the key elements of the brief for Phase 1, and sought in particular to combine the results of the individual studies to:

- Assess how current practice relates to international and national legislation and guidance for both EIA and cultural heritage
- Draw comparisons on the treatment of cultural heritage in the EIA process
- Evaluate the role of experts and the public in the process.

As well as providing an up-to-date synthesis of EIA practice in relation to cultural heritage in North West Europe, the study formed the basis for **Guiding Principles for Cultural Heritage in Environmental Impact Assessment** launched at the European Parliament on 22 November 2005, which are intended to improve the practice of cultural heritage within EIA in the European Union (see Section 5.5 of this report).

1.4 Structure of report

This synthesis report comprises seven main sections. This first section provides a brief history of Planarch and the context for the synthesis of the approach to EIA and archaeology and wider cultural heritage issues in North West Europe. In Section 2, the relevant regional contexts are explored for EIA, cultural heritage and SEA. The key directives, country/regional legislation and institutions are highlighted. Section 3 provides information on the sample of EIAs evaluated across the North West Europe region to provide the foundation for the subsequent analysis. This includes the types of projects covered and their selection. In Section 4, the assessment of cultural heritage within EIA is explored in detail and focuses on the early procedural stages of the EIA process, the approach to archaeological assessment, the particular role of consultation involving both specialist expertise and the public, and the latter stages of the EIA process. Section 5, draws together the findings of the synthesis in relation to the objectives of Planarch 2, and highlights in particular how ‘process’, ‘substance’ and ‘people’ interact in assessing archaeology and broader cultural heritage in North West Europe. Recommendations for future practice are made which culminate in the **Guiding Principles for Cultural Heritage in EIA**. The potential for SEA to add value to current approaches to cultural heritage assessment in North West Europe is also highlighted. The main sources relevant to the study are listed in Section 6, and details of the Phase 1 reports and working group members are provided in the Appendices in Section 7.

2. REGIONAL CONTEXTS

The treatment of cultural heritage within EIA in North West Europe depends on the interpretation of international conventions and requirements, and the particular legal and institutional perspectives prevailing in national and regional contexts. This section focuses on the key issues for both EIA and cultural heritage before discussing SEA which, due to its more recent implementation in North West Europe, is covered in more general terms.

2.1 Environmental impact assessment

The assessment of the effects of development projects on the environment – including cultural heritage – in the European context is motivated by the directives of the European Commission on EIA and SEA. The main elements of these directives are highlighted below, together with the key features of the legislation that implements EIA in the Planarch regions.

2.1.1 *European directives*

The establishment of a uniform EIA system in the member states of the European Union was driven by increasing concern about the deterioration of the physical environment, and also about avoiding unfair competition amongst member states in terms of permitting environmentally contentious developments. The European Commission considered that environmental policies were important to maintain a level economic arena.

Directive 85/337/EEC (implemented in 1988), and the amending Directive 97/11/EC (implemented in 1999), provide a common administrative framework for member states to operate in their particular context. The broad objectives of the EIA Directive include:

- Mandatory assessment of certain classes of project types (Annex I), and discretionary assessment of others (Annex II)
- Provision of information covering the project, environment, likely significant effects, and mitigation measures, submitted to the competent (decision-making) authority
- Consultation of relevant public authorities and the wider public, who must have an opportunity to express their opinion
- Consideration of the information and advice from statutory bodies and public comments in the decision-making process.

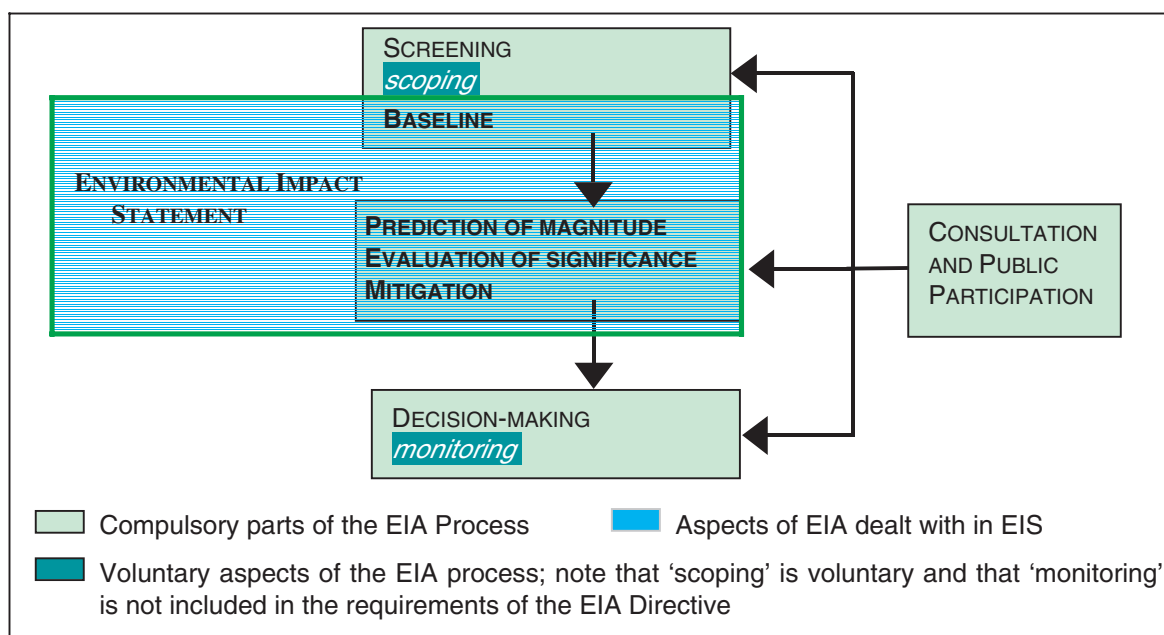
The selection of projects (known as ‘screening’) where EIA is discretionary should include consideration of the location of the project, in relation to a range of aspects, including:

“landscapes of historical, cultural or archaeological significance” (Annex III, EC, 1997)

In addition, Annex III indicates that inter-relationships between different environmental factors should be described. The information provided on the project is contained in a document usually referred to as the Environmental Impact Statement (EIS), and which is submitted with the application for development consent. This information includes various aspects of the environment likely to be significantly affected by the proposed project, including “architectural and archaeological heritage” (Annex IV, EC, 1997).

Figure 2 provides an overview of the EIA process in the context of the European Commission Directive on EIA (85/337/EEC amended by 97/11/EC), and indicates the key stages of the EIA process discussed in this synthesis report.

Figure 2: EIA process in the context of the EU EIA Directive (97/11/EC)



The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-making, and Access to Justice in Environmental Matters (the Aarhus Convention) was adopted in 1998 and entered into force in October 2001 (UNECE, 1998). This convention establishes the rights of the public (individuals and associations) with regard to the environment in terms of receiving environmental information that is held by public authorities, and in participating – from an early stage – in environmental

decision-making, including commenting on plans, programmes and projects relating to, or affecting, the environment. These comments are to be taken into account in decision-making and information is to be provided on final decisions and reasons for them. Finally, there is a right of challenge, in a court of law, where public decisions have been made without respecting these rights or environmental law in general. The Aarhus Convention makes specific reference to “..*cultural sites and built structures...*” and has many similarities to the EIA Directive in terms of activities covered, information to be provided and procedures to be followed. The EIA Directive has been strengthened by a recent amendment to accommodate the requirements of the Aarhus Convention.

2.1.2 *Regional perspectives on EIA*

There is considerable variation in EIA activity in the European Union member states. Although exact data is not readily available, broad patterns can be identified in the number of EIAs per year (EC, 2003) in the Planarch study countries:

- France – 7,000+ EIAs (population 60.56 million; GDP €1,648 billion)
- Germany – 1000+ EIAs (population 82.50 million; GDP €2,216 billion)
- UK – 500 EIAs (population 60.04 million; GDP €1,715 billion)
- Netherlands – 70 EIAs (population 16.31 million; GDP €489 billion)
- Belgium – estimated <50 EIAs (population 10.45 million; GDP €288 billion)

(Eurostat – population as at 1 January 2005, GDP as for 2004)

This wide range in numbers of EIAs, even allowing for different levels of population and GDP, highlights the different national and regional contexts in which the framework EIA Directive was implemented. Different approaches to the implementation of a ‘framework’ directive are inevitable given the variations in legal systems, governance and culture. In many instances, EIA legislation was implemented prior to the requirements of the EU directives, for example France and Germany. Concerns have been raised, however, about inconsistencies in application of the Directive across the member states (EC, 2003).

Legal implementation differs considerably, with Belgium enacting specific EIA legislation, France and the Netherlands having EIA regulations under the broad remit of environmental management, and the UK utilising the planning system. Responsibility for EIA has been largely devolved to the regional level in Belgium (Brussels, Flanders, Walloon regions), in Germany (to the federal states or Bundesländer), and in the UK at a variety of levels. In most member states, developers are responsible for undertaking and financing EIAs, often commissioning consultancies to assist them. In Flanders, the Department of Monuments and Landscapes draws up a list of competent organisations or companies that can prepare EISs

for particular aspects (for example, archaeology). The developer then chooses from this list of specialists, but is responsible for undertaking and financing the EIA process. EIA commissions have been established in the Netherlands and in Flanders. In the former, the commission assists in scoping, reviews the adequacy of EISs and receives monitoring information. In Flanders, the remit of the commission includes the review of qualifications of those carrying out EIAs, determining the scope of studies and reviewing EISs for compliance with legal requirements. The decision as to whether a project should proceed is the responsibility of the competent authority in Flanders, Rhineland and the UK.

2.2 Cultural heritage

The wider importance of cultural heritage is evidenced by the existence of several conventions and treaties covering a range of related aspects. These are outlined below, with specific focus on their relationship with planning and development. The range of sources that cover cultural heritage have differing legal characteristics. EU directives constitute certain obligatory requirements on each member state irrespective of how each implements the directives. The conventions of the Council of Europe and UNESCO charters are binding on those countries that have ratified them, while the ICOMOS charters represent 'good practice' to be adopted whenever possible. The particular regional perspectives that exist in the regional partners of Planarch for delivering these broader agreements are then discussed.

2.2.1 European and international conventions

In the European Union (EU) any action on cultural heritage is limited by both the 'subsidiarity principle', and article 151 of the 1957 Treaty Establishing the European Community (the Treaty of Rome) which excludes harmonisation measures in this, and other, areas. Nevertheless, the European Commission can influence cultural heritage issues through consideration of cultural heritage in its own policies (article 151, point 4) and through the environmental legislation it promulgates for implementation by member states which covers cultural heritage as part of 'the environment' (Teller and Bond, 2003)

The revised European Convention on the Protection of the Archaeological Heritage, Valetta 1992 (Council of Europe (CoE), 1992), builds on the lessons learnt since the original Convention was signed in 1969, and reflects the evolution of archaeological practice. It stresses the importance of the archaeological heritage and the use of appropriate measures for its physical protection (Article 4). The Convention also highlights the threats to Europe's archaeological heritage from, *inter alia*, major planning schemes. The text draws attention to the context of town and country planning operations in the protection and enhancement of the archaeological heritage and, in particular, the inclusion of provisions to protect the archaeological heritage in various planning policies is stressed. Optimum conservation of the

archaeological heritage is reliant on co-operation between archaeologists and planners (both town and regional).

The participation of archaeologists in the various stages of development schemes is regarded as essential, as is systematic consultation between archaeologists and planners. In particular, the Valetta Convention seeks to ensure that:

“.. environmental impact assessments and the resulting decisions involve full consideration of archaeological sites and their settings” (Article 5).

A basic principle is preservation *in situ*, where feasible, of the archaeological heritage, whether identified in advance or as a result of the development process. In addition, the Convention highlights the use of non-destructive methods of investigation wherever possible, and indicates the importance of using *“qualified, specially authorised persons”* for excavations and for other potentially destructive techniques. If the development proceeds, which is often the case, then Article 5 of the Valetta Convention requires that sufficient time and resources should be allocated for appropriate scientific study of the site. Good quality investigations in advance of development reduce or even avoid the need to deal with chance finds during construction works.

Similar themes regarding protection of heritage and fostering co-operative approaches are also apparent in the European Convention for the Protection of the Architectural Heritage, Granada 1985 (CoE, 1985). The architectural heritage is defined to encompass permanent properties comprising both monuments and groups of buildings (including archaeological assets). The Convention indicates the importance of handing down cultural references to future generations, improving the environment (both urban and rural), and fostering economic, social and cultural development. As with the Valetta Convention, the protection of the architectural heritage as an *“essential town and country planning objective”* in authorising developments is highlighted (Article 10). The necessity for effective co-operation between activities for planning and the protection of heritage, with appropriate mechanisms to share information during decision-making processes, is also clearly stated (Articles 13 and 14).

The European Landscape Convention, Florence 2000 (CoE, 2000), aims *“to promote landscape protection, management and planning and to organise European co-operation on landscape issues”* (Article 3). The Convention applies to all areas including *“natural, rural, urban and peri-urban”* areas, and also includes land and water (both inland and marine). In addition it is concerned with all landscape, whether *“outstanding”*, *“everyday”* or even *“degraded”*. The preamble to the Convention makes specific reference to the role of

landscape in cultural issues and its role as a component of European cultural heritage and identity.

The wider context of protecting cultural heritage is also addressed by the International Council on Monuments and Sites (ICOMOS) in its International Charter for the Conservation and Restoration of Monuments and Sites, Venice 1964 and amended in 1989 (ICOMOS, 1964). Article 6 indicates that conservation of a monument implies preservation of the 'setting', and where the traditional setting exists it must be kept. The importance of monuments for society as part of a common heritage is also stressed. The Charter for the Protection and Management of the Archaeological Heritage, Lausanne 1990 (ICOMOS, 1990) indicates the requirement for "*scientific investigation of the archaeological heritage*", embracing the "*whole range of methods from non-destructive techniques through sampling to total excavation*" (Article 5).

A change in emphasis in the protection of cultural heritage is apparent in the Framework Convention on the Value of Cultural Heritage for Society, Faro 2005 (CoE, 2005) which recognises the "*need to put people and human values at the centre of an enlarged and cross-disciplinary concept of cultural heritage*". Heritage is presented as a resource in terms of human development, enhancing cultural diversity and promoting greater dialogue, but also in terms of economic development based on principles of sustainable resource use. The focus is on **why** the value of heritage should be enhanced and for whom, rather than the particular procedures for **how** heritage should be preserved. Article 8a and b requires Parties to utilise heritage aspects in the various development processes – including land-use planning – with cultural heritage impact assessments and mitigation strategies where necessary. The promotion of high quality work through professional recognition and accreditation of specialists is also highlighted (Article 10).

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) Convention concerning the Protection of the World Cultural and Natural Heritage, Paris in 1972, focuses on the need for effective systems to protect cultural heritage. A range of archaeological features is highlighted, and Article 5 indicates the need to integrate protection into planning. In particular, Article 5c and d stress the need for each State Party to the Convention to develop effective and appropriate measures to counteract threats to their cultural heritage, including those necessary for their identification, protection, conservation, presentation and rehabilitation. Measures to protect underwater cultural heritage are contained in the UNESCO Convention on the Protection of the Underwater Cultural Heritage, Paris 2001 (CoE, 2001). This convention also indicates preservation *in situ* as the first option, with

'States Parties' ensuring mitigation of adverse effects arising from incidental or direct activities. The need for competent and qualified specialists is also highlighted.

A characteristic of all these conventions is that they define the cultural heritage in broad terms, in some cases extending beyond what is covered by the heritage protection legislation of individual states that are signatories to the conventions. They are also noteworthy for their consistent emphasis on the need to build cultural heritage protection into land use planning procedures, and on international collaboration on technical and procedural issues.

2.2.2 Regional perspectives on assessing cultural heritage

The legislation and administrative responsibility for cultural heritage in the **Flanders** region of Belgium has been subject to considerable change since the early 1990s. Legislation covering archaeology was only implemented in 1993, and the integration of archaeology within spatial planning was limited, until recently, to protected archaeological zones and monuments. Historic monuments and landscapes were similarly covered. In practice, while thousands of monuments have been covered together with many landscapes, only two protected archaeological zones exist. Recent developments include a re-definition of responsibilities for the new Flemish Heritage Institute and the Department for Monuments and Landscapes, with the goal of creating an integrated heritage framework and legislation. In addition, heritage management has now become part of the Department of Spatial Planning, with archaeological heritage management now based within a specific section of the Department of Monuments and Landscapes. These developments should lead to better integration of archaeology in planning.

In **France**, a national law on archaeology was enacted in 2001, and modified in 2003, to enforce the Valetta Convention and the EIA Directive and thus manage the archaeological resource effectively, subject to scientific research programmes. Cultural heritage is defined in the 'Heritage Codex' as all real or personal estate regarding public or private property which has historical, artistic, archaeological, aesthetic, scientific or technical interest. A distinction is made between historical monuments (usually visible), and archaeological remains (generally buried and invisible). Initially, up to the 1970s and 1980s, archaeological remains were dealt with by 'rescue archaeology', involving identification and salvage excavation during development; the system has now evolved into 'preventive archaeology' where legislation requires the prior planning and integration of archaeological investigations into the development process. EIA is under State control and implemented by its own local services or by private consultancies. The decision document, once approved in the form of a public notice, is passed to the Regional Archaeological Service (SRA), a part of the Ministry

of Culture, to collect the relevant tax and to enforce its implementation. This decision may be to undertake archaeological 'diagnosis' to detect, locate and evaluate archaeological remains, through the Institut National de Recherches Archéologiques Préventives (INRAP) or through the formally accredited archaeological services of local communities. All planning projects requiring EIA, as well as other categories of development, are liable to a tax to cover this 'diagnosis', which is generally undertaken intrusively through trial trenching. The law requires the EIA to be enforced as an unavoidable stage in the process of obtaining quality information.

Overall responsibility for international conventions and treaties lies with the national government of the Federal Republic of **Germany**. The government ratifies conventions and treaties and implements them through law, or passes that obligation to the federal states. The German national government has accepted almost all such conventions with the exception of the European Landscape Convention. The 16 federal states are responsible for natural environment and monument protection by formulating and passing/enacting their own laws. This occurs in different ways in each federal state, with varying natural environment and monument protection acts. Cultural heritage effectively covers monuments and landscapes, i.e. the cultural landscape as this contains the bulk of the material cultural heritage. The Monument Protection Act covers monuments and the Nature Protection Act covers the cultural landscape. In North Rhine-Westphalia, archaeological and built monuments are treated separately both in legislation and by their respective competent authorities. Therefore, there is no clear overall competence or responsibility for cultural heritage.

Legislation for monuments has proved less than adequate in protecting areas, although the protection of objects normally results from the practical application of the law, and at its best sees areas with high concentrations of monuments and townscapes protected. Natural environment legislation comprises both the protection of objects and areas. In practice, cultural landscape, or any component of cultural heritage significance, is generally protected when the corresponding parts of the landscape also have an ecological significance considered to deserve protection. Therefore, currently, the historic cultural landscape of North Rhine-Westphalia and Germany can only be protected through natural environment legislation, but with some restricted opportunities through the monument legislation.

The **Netherlands** has adopted a 'preservation through development' stance through the Belvedere philosophy, which requires cultural heritage always to be taken into account in cases of spatial development. Decisions on how to manage this heritage i.e. to preserve, conserve or allow to be destroyed, should be explicit and justifiable. This is incorporated in

the Nota Ruimta (2002), the national spatial planning policy framework on which the operation of the Town and Country Planning Act is based. Existing heritage can act as a source of inspiration for new development and this may help to preserve it in the long term. Cultural heritage needs to be considered for all developments and EIA provides a procedure to facilitate such consideration. The Monuments and Historic Buildings Act 1998 is currently being amended to implement the Valetta Convention with preservation *in situ* a core goal. Archaeological surveys will be compulsory and there will need to be clear and justifiable decisions on how to deal with the archaeological heritage where major ground disturbance occurs, with the costs borne by whoever is responsible for the disturbance. Excavations will be permitted by consultancies in addition to government bodies and universities.

Cultural heritage issues in the **UK**, including archaeology, are taken into account partly through statutory and non statutory designations of archaeological sites and monuments, historic buildings and areas and places (currently under review for reform), and also the policy planning process for development plans and development control for individual projects. This is provided for through national planning policy guidance on archaeology, built heritage and the wider historic environment. Early consultation with relevant local authority cultural heritage experts is recommended as standard good practice in order to agree frameworks for evaluation. Well established professional standards exist for gathering information through desk studies and fieldwork, guided by specifications provided or approved by local authority cultural heritage experts. There are various standards for assessing the importance of cultural heritage resources, and the principle of preservation *in situ* is enshrined in policy. English Heritage, and comparable organisations in other parts of the UK, act as statutory advisors to government for cultural heritage and, on occasion, provide advice on the EIA process. English Heritage is only a statutory consultee for EIAs covering highways, water resources and uncultivated land projects.

The regionalization of Belgium in 1989 integrated the Wallonia Directorate of Archaeology into the Directorate-General for Physical Planning, Housing and Heritage, providing the opportunity for management of archaeological remains through development control. In 1991, the first archaeological legislation was implemented in **Wallonia**, and provides for archaeology, including protected buried remains, to be officially integrated into town planning schemes. There is, however, no provision to make the developer pay for archaeological work except in some exceptional cases.

The application of a new planning law in October 2002, led to the regional authority 'losing power' to the 'Communes'. Planning applications to the Ministry of the Walloon Region are examined systematically by the Department of Archaeology. Thus, the new statutory

communal planning documents should be used as tools to protect the archaeological heritage, provided archaeologists have the potential to integrate archaeological data. Communal planning documents comprise communal plans; communal design standards that enact the prescriptions of the general planning regulations without any compulsory archaeological provision; and the communal 'schéma de structure' that must contain the provisions of the planning schedule. The non-statutory 'schémas directeurs' allow for more flexible working in some areas and can be given legal force by their inclusion in the communal planning schedule. Future priorities for the communes are a system of information exchange with the Department of Archaeology, improved awareness of archaeological methods, and a map indicating archaeological constraints.

Cultural landscapes

Accordingly, in the countries participating in the Planarch study, cultural heritage is variously protected as archaeological and built (architectural) monuments, historic townscape, archaeological zones and protected archaeological excavation areas. In most of the countries there is separate legislation and an authority responsible for landscape protection and management, but the extent to which cultural or historic landscapes are separately recognised varies considerably.

The **Flanders** region of Belgium has separate legislation for landscapes (dating from 1996) which allows for the protection of cultural landscapes.

In **Germany**, the conservation of historic cultural landscapes has been required by legislation since 1980, and in planning legislation since 1998. Cultural landscape is also mentioned in the nature and landscape acts of the German federal states like Northrhine-Westphalia, which are the competent authorities for monument and nature protection and cultural heritage. There is no legislation, however, for the conservation of historic cultural landscapes or their consideration in EIA, and research into cultural landscapes and planning since 1990 has been largely voluntary.

In the **Netherlands** the historic cultural landscape is not mentioned in legislation but does, nevertheless, play an important role in landscape and spatial planning policy. Since 1976 the historic cultural landscape, cultural landscape elements and relics have been considered in land consolidation planning. Since the 1980s, many reports about the historic cultural landscape have been prepared for regional plans for the provinces (or parts of provinces). Cultural landscape aspects have generally been covered to some degree in EIAs.

In the **UK** historic landscape is an important issue and, since the mid-1990s, English Heritage has instituted a national programme of historic landscape characterisation for England, which has been developed and carried out by local authorities for sustainable heritage management. In Scotland, a broadly comparable historic land use assessment process has been developed, while in Wales a non-statutory register of historic landscapes has been established. A common objective of all these approaches is to ensure that change is managed in ways that respect the historic character of places that people value.

2.3 Strategic environmental assessment

Originally, it was the intention of the European Commission to have one Directive covering policies, plans, programmes and projects. This did not prove possible and, following the generally successful implementation of EIA, the European Commission recognised the role of environmental assessment at a more strategic level in helping to achieve sustainable development. The EC Fifth Action Programme 'Towards Sustainability' indicated that it was *"...logical, if not essential, to apply an assessment of the environmental implications of all relevant policies, plans and programmes"*. Cultural heritage is also featured as a key area in the Council of Europe's 'Guiding Principles for Sustainable Spatial Development of the European Continent' (CoE, 2002).

Directive 2001/42/EC on the assessment of the effects of plans and programmes on the environment was finally agreed after 25 years of negotiations, and became operational on 21 July 2004. As with the EIA Directive, the SEA Directive is a framework directive and needs to be interpreted into individual member state regulations. It applies to all plans and programmes at national, regional and local level prepared for a range of sectors and which set a framework for future development consent of projects listed in the EIA Directive. When determining whether plans or programmes need to be assessed, member states need to take into account:

*"the value and vulnerability of the area likely to be affected due to: special natural characteristics or cultural heritage, ...
the effects on areas or landscapes which have a recognised national, Community or international protection status..."* (Annex II, EC, 2001).

The information to be provided on the likely significant effects of the plan or programme on the environment should include, *"... cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors"*.

The importance of considering the environmental implications of actions at the strategic level for cultural heritage pre-dates the implementation of the SEA Directive. The Granada Convention (CoE, 1985) requires the architectural heritage to be taken into account when drawing up development plans, and for the conservation, promotion and enhancement of the architectural heritage to be “*a major feature*” of a range of policies, including planning. Similarly, the Valetta Convention (CoE, 1992) draws attention to the necessity for archaeologists to participate in the development of planning policies, and for the modification of development plans where the archaeological heritage might be adversely affected.

As SEA is implemented it has the potential to play an increasingly important role in allowing an earlier and more complete consideration of cultural heritage in the perspective of spatial development rather than simply as an often perceived ‘obstacle’ to be addressed by developers at the project stage.

3. SAMPLE OF EIAs

The 'brief' for Phase 1 of the Planarch 2 study included a specific objective to undertake a detailed review of individual EIAs completed in the approximate previous five year period. Accordingly, the Phase 1 studies involved selection of a sample of documents for review, where feasible, in their regional/country context. The review of the EIAs aimed to cover the following aspects:

- Scope of cultural heritage issues covered
- Quality of information provided
- Whether information provided reflects the status of cultural heritage remains
- Proposals for future information gathering
- Sufficiency of information on cultural heritage for decision-making
- Appropriateness of mitigation measures
- Integration of cultural heritage issues within the various procedural stages of EIA.

Whilst all regions took part in developing this brief it was not possible in all cases to select EIAs for such detailed review. Furthermore, not all member states had fully implemented Directive 97/11/EC by the time of this study, and thus the Flanders region of Belgium was unable to provide information on practical implementation of the amended Directive for this reason. The responsibilities of the French Planarch partner, INRAP, are not specifically related to the assessment of EIAs and the French input to this project has thus been to provide some general insight of the situation in France rather than undertake more detailed studies.

Therefore, the detailed analysis of practice in the assessment of archaeology and cultural heritage in EIA in this report is based mainly on the Dutch, English, Rhineland and Wallonian Phase 1 reports.

3.1 Sample selection

In order to draw comparisons and explore commonalities and differences in practice in North West Europe, it was important to have both a wide range of project types represented and a relatively large number of EIAs on which to base the analysis. This allows findings and conclusions to be stated with greater confidence and to have validity in a range of regions/countries. In particular, a robust sample provides a clear basis for development of the **Guiding Principles for Cultural Heritage in EIA** set out in Section 5.5.

The study undertaken in **Rhineland** analysed 93 EISs from the Rhineland submitted during 2000-2003, with road and rail projects making up 40% of the sample. The minerals sector contributed 16% of the sample and land use plans a further 27%.

A total of 100 EISs, submitted across the whole country during 2001-2004, were analysed for the **Netherlands** study. A quarter of the EIAs related to housing, business parks and horticulture, with a further 19% dealing with waste industry projects, and 16% covering leisure, tourism, golf courses, marinas.

In the **UK**, the study area included the counties of Derbyshire, Essex, Kent and Somerset and the Peak District National Park, where a total of 135 EISs submitted during 1999-2003 were analysed. The majority of these EISs (approximately 90%) were submitted under the EIA regulations for Town and Country Planning, as indeed are most EIAs in the UK. Most of these EISs (90%) were for Annex II projects, with extractive industry (30%) and infrastructure projects (45%) predominating, again reflecting wider practice in the UK.

In the **Walloon** region of Belgium, 100 EISs were studied from all the provinces of the region (Brabant, Hainaut, Namur, Liège, Luxembourg) covering the period 1997-2004. A wide range of project types was included, with 31% for building plots and 18% related to plans.

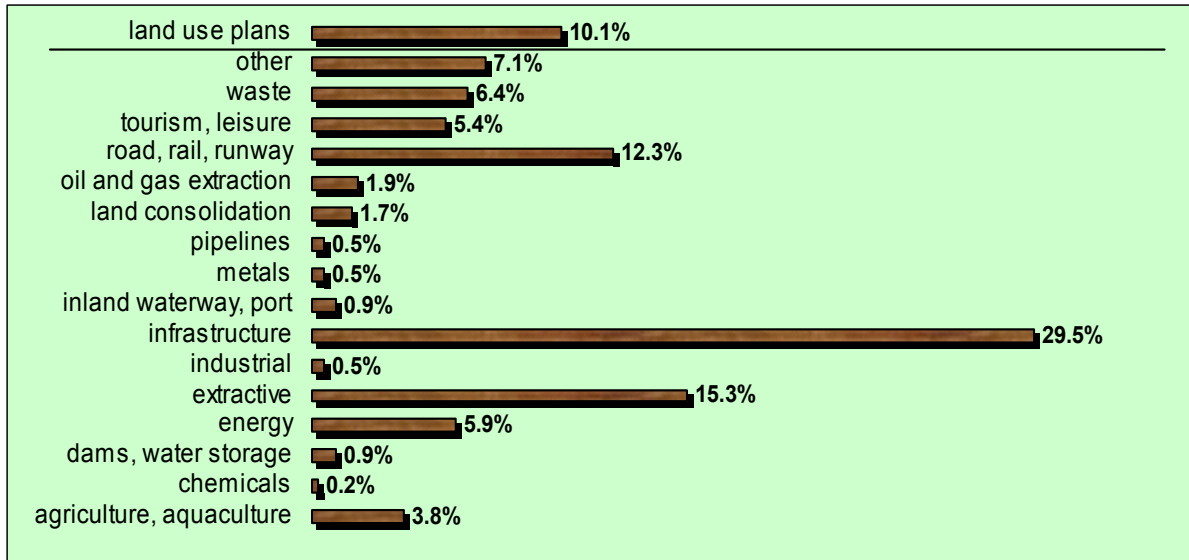
3.2 Sample characteristics

The analysis for this synthesis report was therefore based on a total sample of 428 EISs submitted during the period 1997-2004, covering a wide range of project types as shown in Figure 3. The majority of the EISs were in the infrastructure (30%), extractive industry (15%), and road and rail (12%) project categories, together with plans (10%).

The analysis also utilised other relevant documentation to support the information and data contained in the EISs. These sources included guidelines, inception reports, archaeological studies, correspondence, findings from consultation and participation, and decision letters.

More detailed analysis was also undertaken to explore in greater depth the approach to assessment of cultural heritage. In the Netherlands, for example, 25 case studies were selected for more detailed investigation involving interviews with key practitioners. In the UK 43 cases were examined in depth, including interviews with heritage curators. Where projects had been implemented, decision-making and monitoring outcomes were explored. In addition, eight benchmark cases were selected as a basis for examining key issues and trends in practice.

Figure 3: Sample of EIAs analysed for Phase 2 from England, the Netherlands, Rhineland and Wallonia



sample contains 428 EIS submitted during 1997-2004

4. EIA AND CULTURAL HERITAGE – REGIONAL PRACTICE

4.1 EIA procedure – initial stages

4.1.1 Screening

Screening, or deciding whether EIA is required, is a fundamental step. It is both simple, in that the outcome is either a ‘yes’ or a ‘no’, and complex because this decision is hedged around with a range of overlapping criteria, many of which require subjective judgement. The EU Directive on EIA devotes more space to the question of screening than to any other element of the EIA process, and the importance of this can be seen in the large number of legal cases arising from screening decisions.

The countries involved in the Planarch study utilise a combination of approaches, including thresholds (exclusion, mandatory, indicative), criteria and case-by-case evaluation. The most prevalent approaches were indicative thresholds and case-by-case evaluation. The research undertaken for the Planarch study indicated that cultural heritage did not feature prominently in screening decisions. This is logical, as most screening decisions are made according to the characteristics of the proposed development (as set out in Annexes I and II), as opposed to those of the receiving environment. There is provision, however, within Annex III of the Directive, for environmental factors to be considered in screening decisions:

“The environmental sensitivity of geographical areas likely to be affected by projects must be considered...”

This provides an avenue for cultural heritage considerations to influence screening decisions, as the criteria given for assessing the capacity of the environment to absorb development include:

*“areas classified or protected under Member States legislation...”; and
“landscapes of historical, cultural or archaeological significance.” (Annex III).*

In practice, it seems that bodies responsible for custodianship of the cultural heritage were not routinely involved in screening discussions, and that the use of cultural heritage considerations as a principal reason for requiring an EIA was also rare. The regional study reports indicated only three examples, all from England.

4.1.2 Scoping

Scoping is the stage of deciding which potential environmental effects require detailed coverage in an EIA and how they should be assessed. In cultural heritage terms this implies,

firstly, the need to make a series of decisions on whether to include cultural heritage as a topic and on what components require coverage. Secondly, the potential information and methods to be used in any further studies has to be considered. Aspects of cultural heritage requiring initial consideration in scoping include not only archaeology, but also individual structures, historic zones in built-up areas and cultural landscapes.

In considering the need to cover different aspects of cultural heritage, it is necessary to consider the nature of the effects, whether direct impacts, such as the destruction of archaeological resources through construction activities, indirect or cumulative, and whether these effects are likely to be temporary or permanent.

Scoping is generally considered to be a vital stage of the environmental assessment process, as it allows for the planning of later activities in the light of stakeholder consultation. The EIA Directive, however, says only the following:

“...if the developer so requests...the competent authority shall give an opinion on the information to be supplied by the developer.... The competent authority shall consult the developer and authorities...before it gives its opinion.” (Article 5).

This means that scoping is a voluntary activity, which the instigator of the project may request, in which case the competent authority is then required to participate. This has led to great variation in the manner by which scoping is treated across the Planarch region. The UK has transposed the wording of the directive directly into its EIA regulations, leaving scoping as a voluntary activity. Nevertheless, any formal opinions provided at this stage on the information to be supplied do not preclude further information being required at a later stage (see Section 4.4.1 and Section 4.5).

Other jurisdictions have exceeded the requirements of the directive by essentially making scoping compulsory. This is particularly clear in Flanders, the Netherlands and Wallonia, where scoping follows on from screening, based on the same project inception report, and is co-ordinated by the national (Netherlands) or regional (Flanders, Wallonia) EIA bodies, which are legally mandated to provide advice to the competent authority at this stage. In these cases the outcome is a formalised set of advisory guidelines intended to govern the conduct of the main EIA study. In the Netherlands, the advice of the NCEIA is not binding, but is considered to carry considerable weight and is normally followed closely by the competent authority in drafting scoping guidelines. Even in England, developers were found frequently to produce a ‘scoping report’ as a means of informing stakeholders: where

requested by the developer, the competent authority produces a 'scoping opinion' to guide further work.

Scoping is important in cultural heritage terms because it allows for an initial assessment to be made of the potential for effects to occur, and for decisions to be made on how any studies should be taken forward. An important component of scoping is the involvement through consultation of the appropriate custodial bodies for cultural heritage interests at this early stage in the process, which the study in England found to be common. Scoping discussions tended to focus on the information requirements for establishing a sound baseline, but actual impact assessment methods were not usually covered. It was also rare for cultural heritage to be excluded, or 'scoped out', of the EIA study, which may reflect an acknowledgement of the inherent uncertainty involved in assessing the archaeological potential of a locality at this stage. In seven of 15 cases where cultural heritage issues were scoped out in England, the decision appeared unjustified and, in two of these cases, archaeological deposits were subsequently revealed.

The Planarch studies suggested that, in practice, the effectiveness of scoping was very variable for cultural heritage issues. When carried out diligently, scoping could produce excellent results and improve EIAs significantly, but many factors contributed to less impressive outcomes. In some jurisdictions (such as the UK) scoping could be avoided completely if the developer so desired. Problems remained, however, even where scoping happened routinely, and here the difficulties lay with resources, timescales and with provisions for consultation, all of which could obstruct the effective assessment of cultural heritage issues.

4.1.3 *Baseline*

EIA is a baseline-led process. It is necessary to understand the environmental context of a proposed development to a degree sufficient to enable robust impact predictions to be made. Baseline studies are guided by the results of scoping and are often compartmentalised according to acknowledged scientific disciplines and discreet aspects of the environment. Cultural heritage is one such aspect, but it is complicated by sub-divisions within the field and overlaps with other study areas at the margins. The main cultural heritage considerations are:

- Archaeology – usually defined as buried physical remains, earthworks and ruined standing structures
- Built heritage – buildings and built-up areas of historic interest that remain in use

- Historic landscapes – areas of designed landscape and the historic character and features of the wider countryside.

The main areas of overlap for cultural heritage, in terms of other EIA topics, are with landscape and visual studies, within which it is not unusual to find treatments of the ‘setting’ of cultural heritage assets and of the historic component of more general landscape studies. Wildlife and noise can also be notable areas of overlap.

Baseline studies are therefore concerned with gathering information on the presence, or the likelihood of the presence, of cultural heritage sites in the context of a development proposal and with determining their actual or potential value. Cultural heritage is perhaps unique in impact assessment studies, in that not only can baseline studies quite reasonably fail to identify the presence of assets, but some key methods of archaeological investigation are acknowledged to contribute to the destruction of the remains even as they extract important information. Consequently, it is always necessary to balance the investigative activity required to understand the archaeological resource against the need for preservation *in situ*. Any damage caused by investigation is unlikely to be on the same scale as that brought about by development itself. There are many approaches that can be used, each of which potentially contributes important information from different sources. The key methods identified by the Planarch study were:

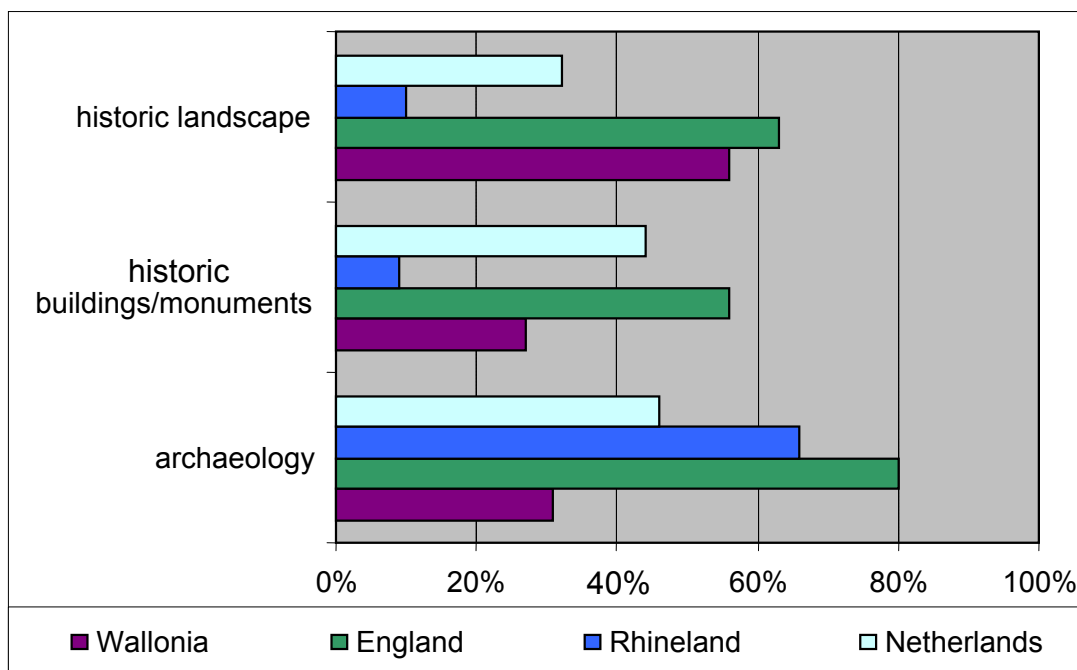
- Desk studies – concerned with obtaining data from existing sources of information, such as registers of known heritage, lists of protected sites and buildings, historical documents, maps and records of previous archaeological or landscape studies and maps of archaeological potential (such as those that have been produced for the Netherlands).
- Walkover survey – the simplest form of which is a site inspection, during which surface finds and features are noted, and buildings and structures examined
- Systematic non-intrusive evaluation – which may include a package of methods and sampling strategies, including traditional topographical survey, geophysical methods, structural survey of buildings and aerial photography, that can provide a wide range of scientifically collected data without physically disturbing the potential cultural heritage site under investigation
- Intrusive evaluation – entailing disturbance of the remains under investigation through excavation or physical uncovering of building fabric. In France this is routinely through systematic trial trenching, while in the Netherlands boreholes are regularly used to investigate deep alluvial deposits. The extent of intrusive investigation required relies on a clear basis for scientific sampling to enable

predictions about the nature and extent of cultural assets to be defined (Hey and Lacey, 2001; Blancquaert *et al* 2005), thereby promoting informed decision-making.

Whatever methods are used, the level of work needed will vary according to the importance, or potential importance, of the cultural heritage resources and the information needed to make decisions. Practice also varies from one country to another depending on legislation and established approaches. The outputs assist both in making decisions about the acceptability of development and in helping to define the scope (and potential cost) of any mitigation measures required. For cultural heritage assets, intrusive investigation techniques can be both a method of collecting baseline information and a mitigation measure, whereby the information that a site holds is retrieved prior to its loss through development.

The broad types of cultural heritage covered in baseline investigations showed marked similarities across the Planarch region. Overall, most studies focussed on archaeological issues, followed by studies of the built environment with coverage of the historic landscape less common (Figure 4).

Figure 4: Coverage of cultural heritage types in baseline studies



Some variation in approach and coverage was, however, identified. Interestingly, palaeo-environmental issues were addressed in about a third of English EIA cases examined, while the Netherlands study reported the perception of some of those interviewed that most attention was focused on remains that were either visible or legally protected for the built heritage, and that the cultural heritage **potential** of a particular locality tended to be

neglected. In Rhineland fewer EIAs addressed cultural heritage issues, but those that did often had more thorough baseline treatments that were more likely to utilise topographical or geophysical survey techniques to supplement documentary sources. In Wallonia, consultation of written sources varied from 31% of EISs for archaeology to approximately 80% of EISs for monuments and landscape.

In terms of the methods used for gathering data about different types of cultural heritage assets, desk study methods overwhelmingly predominated, often supplemented by a field walk-over but rarely by any more complex survey methods and only exceptionally by any form of intrusive evaluation.

A very important issue that emerged from the studies was the extent to which the potential for a development to affect currently unknown cultural heritage – especially buried archaeological sites – was recognised. The German and both regional Belgian studies all indicated (to differing extents) that some record of the presence of archaeology **within** the area to be developed was an important trigger for such potential to be recognised and assessed. In England, surveys can be required where little or nothing is definitely known, but where there may be good grounds (usually the broad historical, archaeological and topographical context of the development site) for suspecting that the absence of archaeological remains is not a true negative.

The Netherlands is unusual in having a national model for predicting the likely occurrence of unknown buried archaeology. In the other countries no such national models exist, but in England a few cases were noted of some attempts at modelling the probability and character of as yet undiscovered archaeological deposits. However, this type of approach was rare and lacked any agreed methodology.

4.2 Assessment of cultural heritage

4.2.1 Assessment of effects

The EIA Directive is not specific about the methods to be used in the assessment of effects, instead setting out only what should be covered in the information presented in the EIS. The Directive requires:

“A description of the likely significant effects of the proposed project on the environmental, resulting from:

- the existence of the project,*
- the use of natural resources,*

- *the emission of pollutants, the creation of nuisances and the elimination of wastes,*
and the description by the developer of the forecasting methods used to assess the effects on the environment” (Annex IV).

This is further qualified so that the required description “*should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project*”. The inclusion in this clause of positive effects, on an equivalent basis with negative effects, is noteworthy.

Despite the range of well established investigation methods available for gathering baseline information, the assessment of potential effects on cultural heritage assets lacks a standardised framework, with no single approach that can be readily applied to the wide range of circumstances that may occur. Mathematical and computerised modelling techniques are available to support the prediction of impact magnitudes in many areas, such as air quality, traffic and noise, but no such techniques are available specifically to the cultural heritage field. The range of effects of potential concern includes:

- Direct effects such as destruction or loss of a cultural heritage asset through construction, demolition or other activities, and changes of or intrusion on its setting
- Indirect effects such as the effect of changes in air quality, drainage or traffic and machinery vibration on the fabric of a standing structure or the condition of buried remains.

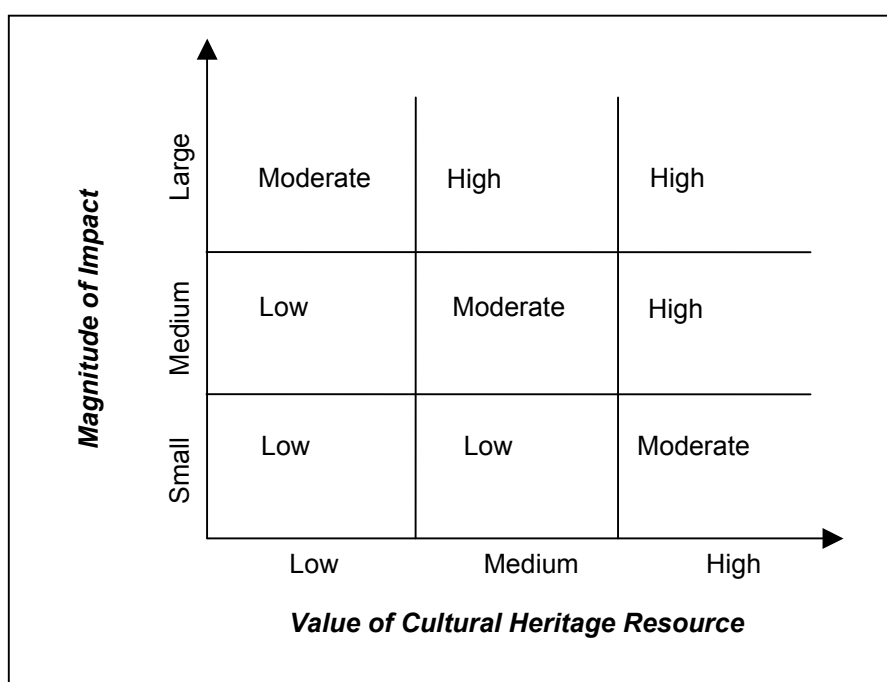
Added to this, is the need to assess the duration and extent of effects, whether they are beneficial or adverse, whether an effect might be cumulative with another source, or whether impacts might act in combination to give rise to additional effects. This can become a complex exercise. This is also true for other impact areas, such as ecology, and research has shown that some of the more difficult issues tend to be covered in either a rudimentary fashion, or not at all.

In assessing effects on cultural heritage, the research undertaken for Planarch indicated that most studies covered only a small range of direct adverse effects such as loss or damage caused by construction activities or visual intrusion. There was little evidence for the development of approaches to impact evaluation based on the concept of people as the receptors of cultural heritage effects and, while visual intrusion was often explicitly evaluated, wider concepts of ‘setting’ seemed poorly understood and were rarely addressed in EIAs.

Indirect and cumulative effects were also rarely covered in any detail, although more generally these are acknowledged to be problematic areas for EIA overall and not solely for the cultural heritage field. A similar picture existed for the coverage of beneficial effects, although this arose more from a preoccupation with identifying and mitigating adverse effects, rather than for any specific methodological or technical reason.

In addition to determining the character and magnitude of an effect, an EIA must also evaluate its significance, or importance. This is usually done by contrasting the size and character of the effect with the value and sensitivity of the environmental resource. Thus it is possible for a large-scale effect to be judged to be of low significance if it affects a component of the environment that is particularly robust, in relative abundance or not intrinsically important. Conversely, a small-scale effect on sensitive, scarce or protected resources can be considered highly significant. Figure 5 shows how this approach, which may be equally applied to both negative and positive effects, can be represented visually.

Figure 5: Determining impact significance



In cultural heritage terms, assessing both the magnitude and significance of effects can be problematic because of the subjective nature of much of the impact assessment process and, more particularly, because of the degree of uncertainty surrounding the character of buried and undocumented remains. This is reflected in the findings of the Planarch regional studies, which indicated that approaches to determining the importance of cultural heritage resources were very variable and, in many cases, left much to be desired. For instance, in England, specific criteria for assessing the importance of cultural heritage assets were used in only 30% of cases. Most commonly, these criteria were based on legislative arrangements for

protective designations for sites or structures, resulting in the grading of remains as nationally, regionally, or locally important. While this approach has the benefit of relating closely to existing UK conservation policy frameworks and is relatively simple to operate, it is also limited and takes little account of wider factors arising from the individual local context of each EIA case. In some cases variations on this approach were used, with more categories or different criteria for establishing value, but it was much rarer to find attempts to define impact significance in broader, holistic, terms such as those put forward within the 'Quality of Life Assessment' approach.

Similarly, in the Netherlands cultural heritage was generally covered through impact descriptions and scores based on descriptive surveys. The relationship of the scores to the actual value of cultural heritage was not always clear. In Rhineland, nearly three-quarters of the EISs studied described effects on cultural heritage, but only a few provided detailed explanations and included indirect effects.

4.2.2 Mitigation

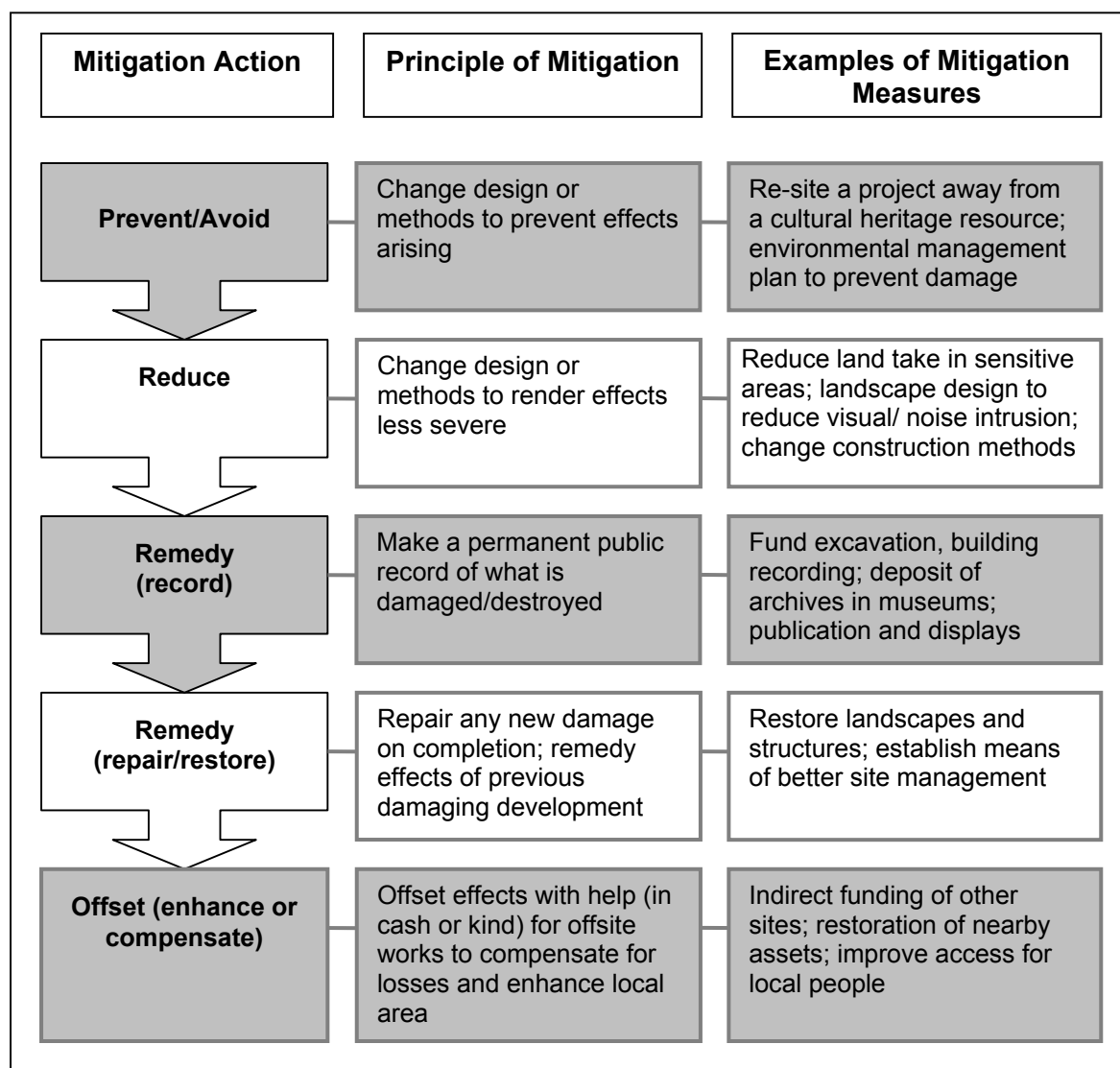
The European Directive requires that, as a minimum, the EIS provides:

“a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.” (Article 5, repeated in Annex IV).

This requires the developer to put forward plans for the mitigation of any likely significant effects on the cultural heritage. In general terms, mitigation of adverse effects encompasses a wide range of potential action and inaction, according to a widely recognised hierarchy of options (see Figure 6).

The hierarchy, to some extent, reflects core principles set out in the preamble of the EIA Directive, that best environmental policy consists of “*preventing ... nuisances at source rather than subsequently trying to counteract their effects*”, and its stress on “*the need to take effects on the environment into account at the earliest possible stage*”. The hierarchy also reflects core principles of international cultural heritage policy, which consistently stress the priority of preservation *in situ*, and the importance of recording, recovering artefacts and analysing and publishing data about cultural heritage assets that cannot be preserved *in situ*. Measures to ‘offset’ damage by compensatory measures (Figure 6) are generally considered as far less appropriate. It is generally considered that mitigation has the greatest benefits for the lowest cost when it is applied early, and by changes in project design, to avoid effects altogether.

Figure 6: A mitigation hierarchy for adverse effects on the cultural heritage



The findings of the regional Planarch studies suggested that there is great variability in the treatment of mitigation within the project study area. In Rhineland and England, more than 90% of EISs contained some kind of proposal for mitigation measures, but the Netherlands study report states that “mitigating measures for cultural heritage are rare in the EIS” (para. 5.3, p40 – see Section 7.1). Interviews with stakeholders exploring the reasons for this revealed a prevailing view that mitigation is very difficult to achieve for effects on cultural heritage assets. It was also found that specialist consultants were very seldom involved at this stage, having only been involved in gathering baseline data. It appeared that mitigation was often left to the regulatory authorities to determine.

The studies for Flanders and Wallonia both reported the existence of guidelines that covered the mitigation of effects to cultural heritage assets, promoting preservation as the preferred option, with excavation as an acceptable alternative where damage or loss is unavoidable.

In England, national planning guidance notes for cultural heritage also provided clear advice on the primacy of preservation *in situ*, especially for nationally important assets.

In Rhineland, mitigation allowing for preservation of assets was found to be very rare. Proposals instead generally focused on providing for the proper investigation of threatened sites. In practice, much the same situation was found in England. Mitigation was commonly proposed, but for archaeological remains usually focused on general strategies for evaluation and recording prior to, or in parallel with, construction activities. Thus, in most cases, there tended to be acceptance that the loss of archaeological remains is tolerable – or indeed inevitable – provided that the information that it contained was captured through ‘preservation by record’. It must be recognised, however, that in many cases the basic choice of site for a development may well have already avoided the most important cultural heritage assets and, in these cases, such avoidance to preserve them *in situ* would not be indicated in the EIS.

In England, it was found that designed-based mitigation was uncommon for archaeological remains, but (as might be expected) was often the strategy of choice for the built environment. Mitigation of this type includes landscape design to avoid visual intrusion by a new development, or the application of design standards so that new buildings are harmonious with the historic built environment.

Mitigation for cultural heritage assets presents an ethical dilemma for the archaeologist. For many years it has been recognised that the excavation of archaeological remains entails destruction, and denies the opportunity to future generations of archaeologists, who may have more powerful investigative techniques at their disposal. One might therefore expect to see more evidence in EIA of efforts to promote the preservation *in situ* of buried remains. That this does not appear to be the case might imply that a consensus view has developed which accepts that mitigation through investigation and recording is to some degree justifiable and desirable, especially when carried out with clearly defined scientific objectives. This approach allows for recovery and interpretation of data to take place in the knowledge that the choice is between achieving some long-term understanding, and complete loss of knowledge along with the physical loss of the remains. Alternatively, this lack of effort to protect buried remains might reflect the relative weights of conservation and development pressures.

Uncertainty is also an important theme in impact assessment for cultural heritage. It is in the nature of archaeology that buried remains cannot always be detected, no matter how elaborate are the baseline studies, unless there is a commitment to methods such as ‘trial

trenching' as adopted in, for example, France. To a lesser degree, this can also apply to standing buildings and landscape features. The English study concluded that many EISs contained an acceptance of this uncertainty and its implications for subsequent impact prediction and mitigation planning. This is so well established that by far the commonest type of mitigation proposed in England is either further stages of evaluation and investigation prior to commencement of construction, or a 'watching brief' with some provision for fuller evaluation and investigation of any important finds made during development. In many ways, this is a sensible and practical answer to a difficult problem, but there can be a danger that practice is evolving to rely more and more on this type of approach, at the expense of more thorough field surveys in baseline studies, and of proper consideration of preservation *in situ* as an option for mitigation. Undertaking appropriate baseline studies prior to the decision on the project is a requirement of the EIA Directive (97/11/EC, Annex IV) that has been the subject of legal challenge, and archaeologists and developers should be mindful of this when embarking on an EIA.

4.2.3 *Involvement of cultural heritage professionals*

The effectiveness of the EIA process depends on many factors, but one of the most important is the appropriate deployment of specialist environmental and technical expertise in undertaking the assessment and planning any mitigation measures. For the field of cultural heritage this requires that archaeological, historic built environment and landscape professionals are involved in conducting the EIA study, in the consultation process and in reviewing the quality of the EIS for decision-makers. It is clear from the Planarch study reports that approaches to the deployment of professional expertise have evolved differently across the Planarch study area.

In most jurisdictions, the EIA procedure delegates responsibility for the conduct of an EIA to the proponents of individual projects. EIAs can be complex exercises, and require the deployment of appropriate skills across both the range of environmental aspects (of which cultural heritage is one) and the procedural stages of assessment. Project management, together with editorial and presentational skills, can be as important as technical expertise in ensuring that the EIA produces robust findings and communicates them effectively.

Some proponent organisations are large and are able to run EIA projects themselves, but most engage a consultancy organisation for the purpose. The consultancy sector has grown quickly in order to respond to the need for specialist environmental services, and there is a large and varied range of such organisations, each of which has its own particular strengths and weaknesses arising from its size and the particular skills of its employees. This leads to complexity in EIA projects, as the organisation running the EIA often needs to buy in

specialist expertise where it does not exist in-house. Thus, the cultural heritage baseline and impact assessment studies may be written by a professional team that has little direct involvement in writing the EIS. This gives rise to the potential for editorial misinterpretation (or bias, whether intentional or not) and inaccuracy when specialist reports are incorporated into the EIS.

Despite the significant risk of error, the other possible approach is to deploy non-specialists from the EIA team to conduct certain studies. For cultural heritage, this approach can realistically only encompass desk studies and is therefore of limited value, but it does occur with surprising frequency. The Planarch study reports found that the involvement of professional expertise in conducting EIA studies was difficult to measure because very few EISs examined were specific about who had been involved in undertaking work on the cultural heritage elements. However, it was possible to identify that this work was sub-contracted to external specialists in 37% of cases in England and 15% in the Netherlands. The study in England noted that EISs utilising external specialists tended to be of higher quality than those where the developer or main consultant conducted the work in-house. Flanders has developed 'registers of experts' approved to conduct studies related to particular environmental aspects, of which 'Monuments and Landscapes' covers cultural heritage, although archaeology was initially not included in the criteria against which 'experts' are tested. This is now being addressed, but illustrates the difficulties that can arise from a more prescriptive approach.

4.3 Consultation: expert bodies and public

One of the main pillars of EIA as an effective aid to environmental decision-making is that it is an open and accountable process. This has always been an important component of the EU Directives on EIA and, more recently, the UNECE 'Aarhus Convention' (see Section 2.1.1).

While much of the detail for arrangements regarding consultation and participation in EIA is left for member states to determine, the general requirements are clear and detailed. In summary, member states are required to ensure that there is a statutory mechanism by which appropriate experts are given an opportunity to express their opinion on the request for development consent, and on the contents of the EIS; states also have to ensure that the public have the opportunity to express their opinion before development consent is granted.

4.3.1 Consultation with expert bodies

Under the EIA Directive, it is the decision-makers that are required to consult expert organisations, which will often include state heritage bodies or other heritage regulators.

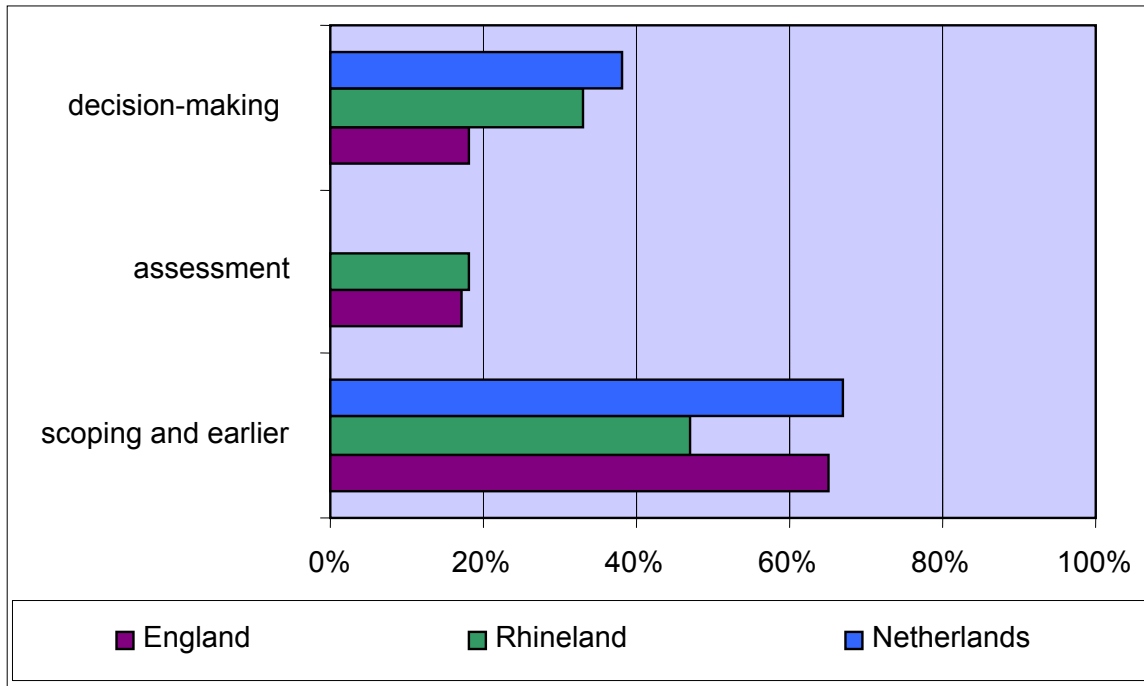
This mandatory consultation phase takes place when the finished EIS is received and competent authorities are required to take any views expressed into account in decision-making. In addition, expert bodies are also required, if requested, to supply any relevant information they hold to those undertaking the assessment.

Every jurisdiction studied in Planarch 2, provides for this end-stage formal consultation procedure with one or more expert bodies with responsibility for cultural heritage matters: the success of the consultation process often depends on the willingness, or capacity, of the expert bodies to engage in the process. The EIA Directive requires that these bodies are given an opportunity to comment, but does not require them to do so. In common with expert bodies dealing with other aspects of the environment, participating in consultation is simply one function among many and is often prioritised accordingly.

Although the EIA Directive provides for consultation and participation at specific points in the process, it does not prevent it taking place at other times. Informal consultation, often led by the developer, can take place at various points in an EIA project and can be extremely effective in shaping the outcome. The flexibility that this allows can be very useful, but also leads to great variations and inconsistencies in the practice of EIA (Figure 7). The preamble to the EIA Directive specifically highlights *“the need to take effects on the environment into account at the earliest possible stage in all the technical planning and decision-making processes”* and the Rhineland study report (see Section 7.1) commented that *“an early consultation.... at the screening stage or, latest, during scoping helps to reduce problems and avoid delays”* (p 23). There was some indication that this was being recognised more widely. The Planarch study found a mixed picture in respect of consultation, particularly in the early stages of the EIA process. Only in Wallonia was early consultation reported to be very rare, and the relevant department was consulted on archaeology in only about a third of cases.

Scoping provides one clear opportunity for early consultation, but it is still a discretionary step that is up to the developer to initiate. Since it does not always take place, a crucial opportunity for early consultation with expert bodies may be missed. In practice, many of the Planarch countries have imposed additional requirements for consultation at the scoping stage. For instance, in the Netherlands and Flanders the inception report system is a key aid to early consultation and the Rijksdienst voor het Oudheidkundig Bodemonderzoek (Netherlands National Service for Archaeological Heritage – ROB) reported giving its views on more cases at the inception report stage (more than 60%), than at the decision-making phase (below 40%), when intervention is undertaken not only to point out areas of weakness, but also regularly to commend instances of good practice.

Figure 7: Consultation of statutory cultural heritage bodies in EIA process



Additionally, evidence was found for a significant amount of early consultation on a less formal basis. In the UK, where scoping remains discretionary, early consultation of expert bodies (predominantly with archaeologists) by developers was common, taking place during scoping in just under 60% of cases at the scoping stage, and in between 10%-20% of cases during baseline studies and impact prediction, though the proportion for the screening stage was much lower. In Germany, the Rheinisches Amt für Bodendenkmalpflege (Archaeological State Service in the Rhineland – RAB) was found to be involved in consultation at the scoping stage or earlier in 51% of cases though, in a further third of cases, consultation first occurred only during the decision-making phase, which was considered to be too late for effective consideration of cultural heritage. This mixed picture is compounded by findings on the limited extent to which the RAB engaged in the consultation process, often failing to provide a representative at scoping meetings due to resource limitations.

4.3.2 Public participation

Public participation in EIA is required by the EIA Directive only during the decision-making period, after the completion of the EIS. The decision-making authority is required to take the results of the participation exercise into account in reaching its decision. This decision must be published with any conditions attached, as well as the rationale behind it, and details of the public participation process and of the mitigation measures to be applied. In the Netherlands, the public also have a role in scoping.

The opportunity for the public to review and comment on EIAs is provided for when the completed EIS is submitted to the competent authority for review and decision. The EIA Directive requires that the EIS be made available for scrutiny by members of the public, that a non-technical summary is published, and that a period of time be set aside during which comments can be submitted. Cultural heritage is part of this process, but only as one environmental aspect among many that is covered by the EIS.

The Planarch regional studies did not review public participation in great detail, but did find that cultural heritage did not generally feature as a main topic of concern among those members of the public expressing opinions. While it may be no surprise that other aspects of the environment are of more immediate or pressing concern in the public mind, this may also reflect a more general failure of the cultural heritage discipline to maintain a suitably high profile and to engage effectively the wider community in recognising the importance of cultural heritage assets.

4.4 EIA procedure – decision-making and follow-up

4.4.1 Decision-making

Essentially, the decision-making phase is concerned with evaluating all the information about a project, of which EIA forms one consideration among many, in order to determine whether a project should be allowed to proceed. In making this decision it is possible that some environmental damage might be considered acceptable in order to gain the economic or social benefits of a particular project. The job of EIA is to present a coherent body of information on the likely environmental consequences of a project so that decision-makers are fully informed. In this respect, it is relatively rare for an EIA to result in the outright refusal of the project. Instead its influence tends to be to ensure that projects proceed in a more environmentally acceptable form through the choice of environmentally sound alternatives, and by appropriate impact mitigation planning.

The Planarch studies, reached the conclusion that the profile of cultural heritage issues in decision-making was limited. The general view can be summed up by one of those interviewed for the study in the Netherlands:

“Cultural heritage does play a role ... but it does not ultimately influence the essence of the planning”.

The Netherlands study reasoned that this lack of profile for cultural heritage in decision-making may reflect its limited role at other points in the process compared to other aspects of the environment.

Of the cases studies in the Netherlands, 40% had required further information on cultural heritage issues to be submitted following the review of the EIS. In England, the number was found to be similar (42%), which largely arose for one or both of two reasons, namely that the baseline data or the impact prediction analysis presented was flawed, inadequate or incomplete. The study in England also identified six cases where cultural heritage issues had been important (in two cases, principal) reasons for refusal of consent following submission of an EIS.

4.4.2 *Monitoring and follow-up*

Monitoring and follow-up cover actions that check on the outcomes of the EIA process during the implementation and operation of a project. Conducting effective monitoring and follow-up allows for:

- The accuracy of impact predictions to be checked
- The effectiveness of mitigation measures to be evaluated
- Any unexpected effects to be identified
- Corrective action to be taken where necessary.

The importance of monitoring and follow-up has been consistently advocated by writers on EIA, but policy-makers in the EU have so far not included a requirement for it within the EIA Directive. This omission has therefore also found its way into the EIA systems of EU member states and it is perhaps not surprising that, as a result, there is a low general level of monitoring and follow-up activity within the Planarch study area. Cultural heritage, however, may be better off in this respect than many other environmental aspects. The general acknowledgement that cultural heritage EIA studies are full of uncertainty, at least in respect of buried remains, leads to the widespread use of monitoring as a form of impact mitigation in the shape of what is referred to in England as a 'watching brief', which allows for the monitoring of development activity and for appropriate action to be taken if discoveries are made. In England, a watching brief was provided for in a third of the cases examined.

4.5 Quality of outcome

The purpose of the EIA procedure is to produce an analysis fit for the purpose of informing decision-makers about the likely environmental consequences of a given proposal. All the

factors discussed above contribute to the overall quality of the EIA which, like the proverbial chain, is only as strong as the weakest link – whether this is in the skills of the team, the methods used, the consultation arrangements, or any of a number of other factors. Ultimately, however, the usefulness of the outputs of the EIA is determined by the decision-maker and consultees, who are at liberty to accept an EIS of lesser quality as fit for purpose, while being critical of an EIS on which much more time, money and expertise has been expended.

The Planarch regional studies drew interesting conclusions on the ‘quality’ of the cultural heritage components of published EISs. In Rhineland, 71% of EISs studied were considered to meet, or exceed, the minimum demands of the EIA regulations. In England, 58% of EISs were rated as ‘satisfactory’ or better according to a widely used set of review criteria, though a review of the actual outcomes of some of these EISs suggested that most were less effective at identifying and evaluating effects than had appeared to be the case. There was clearly scope for improvement in taking cultural heritage into account in Wallonia, but studies were improving in both their precision and the range of issues covered. Although the overall level of satisfaction can be regarded as positive, there are likely to be variations in standards applied by those reviewing EISs working in different national frameworks and with differing perceptions.

There were also suggestions that cultural heritage issues tended to be covered better in public sector projects than private sector ones, and that those that used cultural heritage specialists were generally better than those that did not.

The study has underlined the importance, for effective EIA, of the employment of appropriate cultural heritage skills during the assessment and during a robust process of independent review and consultation. This reduces the likelihood, and extent, of errors and omissions in the EIS, and increases the opportunity for any that may occur to be identified and addressed before key decisions are made.

5. CONCLUSIONS

5.1 Phase 2 objectives

This section of the report draws together the key findings of the synthesis of the six reports produced during Phase 1 of the Planarch study. The conclusions bring together the objectives of the synthesis stage, which were to:

- Assess the effect of contextual issues (international and national legislation and guidance) in relation to both EIA and cultural heritage
- Draw comparisons on the treatment of cultural heritage in the EIA process
- Evaluate the role of specialists and the public in the process.

These are considered under three main topics, 'process', 'substance' and 'people', and are used to draw out the major areas of similarity and difference in terms of procedure and practice in the systems evaluated. Recommendations are then proposed to improve practice, culminating in the ten **Guiding Principles for Cultural Heritage in Environmental Impact Assessment**, which were launched at the European Parliament on 22 November 2005.

5.2 Key findings

Despite the existence of common frameworks for both EIA and cultural heritage in European and international directives and conventions, it is clear that different interpretations exist within the countries and regions of North West Europe. Despite a shared cultural heritage, which does not conform to existing national boundaries, each country/region has evolved its own particular approaches to assess, value and protect that heritage. Each country has unique systems to deal with EIA and cultural heritage, whilst nevertheless grappling with similar problems and ultimately seeking to achieve the same outcomes.

It is worth noting that two key principles affirmed in the preamble of the EIA Directives (85/337/EEC and 97/11/EC) are also fundamental to internationally accepted principles for management of the cultural heritage, namely that best environmental policy consists of:

- *“Preventing ... nuisances at source rather than subsequently trying to counteract their effects”*
- Recognising *“the need to take effects on the environment into account at the earliest possible stage in all the technical planning and decision-making processes”*.

In effect, both these statements underline key factors in addressing the considerable uncertainties and unrecognised potential that are especially inherent in the archaeological aspects of cultural heritage. These are the primacy of the principle of preservation *in situ* for cultural heritage studies, the need for careful, technically competent specialist consideration of the issues, and the importance of gathering adequate baseline information (where necessary through stages of field investigation).

5.2.1 'Process'

Cultural heritage can, and should, be considered throughout the EIA process, and the EIA Directive makes specific provision for such consideration during **screening**. The Planarch study indicates, however, that cultural heritage issues seemed at best to play a minor role in the decision to undertake an EIA, a decision which generally appeared to be based on project characteristics. Similarly, bodies responsible for cultural heritage custodianship were not routinely involved in screening.

Under the provisions of the EIA Directive, **scoping** is effectively a voluntary process, but there is variation in how decisions are taken on the potential environmental effects to be covered in the EIA. In some jurisdictions, namely in Flanders, the Netherlands and Wallonia, scoping requirements exceed the Directive and scoping is a compulsory stage in EIA. The benefit of a more systematic approach is also recognised in the UK where scoping reports are commonly prepared and scoping opinions by competent authorities guide the assessment. In terms of cultural heritage, scoping seemed to focus on information requirements for the baseline stage with variable discussion of methods to be employed, while consultation on methods and results of impact assessment was rare. Discussion with custodial bodies at this stage was common in the UK. Cultural heritage was rarely 'scoped out' at this stage, perhaps reflecting the uncertainty inherent in assessing archaeological potential in this part of the EIA process.

The establishment of the **baseline** can involve a wide range of cultural heritage elements – archaeology, built environment, historic landscapes – but coverage was variable and these were often dealt with in conjunction with other topics such as landscape and visual studies. Baseline studies seek information on the presence, or likely presence, of cultural heritage sites and their actual or likely value. The methods used in North West Europe were:

- Gathering existing sources of information through desk studies (the most popular approach)
- Walkover survey (often to supplement desk studies)
- Systematic non-intrusive surveys (often not undertaken)

- Intrusive investigation (more rare, but increasingly undertaken).

These methods can be used alone or in combination to suit each case. The use of intrusive investigation, for instance in the form of systematic trial trenching or bore-holes, is gaining popularity as a cost effective approach to detecting, locating and understanding the below ground archaeological remains present on a given site. France and Germany are the main supporters of this approach in North West Europe.

Most studies focused on archaeology with built environment being less common and historic landscape rarely covered. Greater attention was paid in England to identifying areas of potential where nothing is currently known within the development area.

The profile of cultural heritage in **decision-making** on projects involving EIA seemed to be limited in North West Europe, although where important sites are involved this profile was inevitably higher. Unsurprisingly, decisions on projects and whether they should proceed very seldom hinged on cultural heritage issues. Nevertheless, in the UK at least, cultural heritage was often one among many factors cited where proposals were refused, and quite often gave rise to requests for more information or analysis, especially where specialist advisers were active in the decision-making process. Reversibility of an effect is one of the criteria in Annex III of the EIA Directive and this is an important aspect to take into account when considering whether a project requires EIA and also in considering cultural heritage issues when making the decision on whether the project should proceed.

The **monitoring** of a project and its effects is not required under the provisions of the EIA Directive, so practice in this area was generally low. Nevertheless, the inherent uncertainty in dealing with cultural heritage issues led to the use of monitoring through staged evaluation and investigation, or through a 'watching brief', and then further mitigation as the project developed. In the UK, for example, this approach was used in a third of the cases examined.

5.2.2 'Substance'

The EIA Directive indicates cultural heritage as one of the aspects to be considered when **assessing the potential impact** of a project on the environment. The Planarch study reports indicated that most EIAs are limited to coverage of a small range of direct impacts when assessing cultural heritage. The weaker treatment of temporary, indirect and cumulative effects – and also positive effects – for cultural heritage reflected a broader problem common to the assessment of effects for all aspects of the environment. In addition, the concept of people as receptors seemed to be rarely considered, and wider concepts such as 'setting' seemed poorly understood and rarely, or inadequately, addressed. Potential

linkages between cultural heritage and biodiversity were under-explored and such an approach might help promote more holistic thinking about 'landscape', particularly where land use has been less intensive.

As in EIA studies more generally, the consideration of magnitude and significance was variable and often weak. This was perhaps not surprising given the lack of standard approaches to impact assessment for cultural heritage and the degree of uncertainty involved in this area. In the UK, where specific criteria were often used to judge the importance of cultural heritage aspects, they were usually based on legislation concerned with designation and therefore relatively limited in scope. In addition, the procedures and methodologies used to assess effects on cultural heritage (as with other environmental topics) were seldom reported systematically or in detail.

The difficulty of addressing 'uncertainty' did not appear to be routinely considered, although the UK report indicates a very widespread general acceptance of the problem and its implications in the generalised recommendations for evaluation and a 'watching brief' approach. Nevertheless, this was seldom based on any systematic risk-based analysis or predictions.

Mitigation in the EIA process has the greatest potential to be effective when considered early in the process. The treatment of mitigation for cultural heritage seemed to be quite variable in North West Europe. Mitigating measures were rarely proposed in EISs in the Netherlands, due to the difficulty in achieving effective outcomes and the situation in Rhineland appeared similar, with the focus being on proper investigation of threatened sites. In the UK, mitigation tended to focus on evaluation and recording in conjunction with construction activities. However, in Wallonia guidelines promoted a more hierarchical approach to mitigation, although this may lead to under-reporting in the EIS as cultural heritage constraints may be dealt with in the early stages of site selection and project design, before work on compiling the EIS begins.

5.2.3 'People'

Consultation and participation are widely recognised as important features of environmental decision-making. The EIA Directive requires member states to make arrangements to involve both the public and appropriate expert bodies. Consultation with cultural heritage **expert bodies** appears to take place at all stages of the EIA process – but mainly scoping and decision-making – in all the regions studied, but to varying degrees, even within the same jurisdiction.

Cultural heritage issues did not seem to feature as a main area of concern for the **public** in any of the systems evaluated. This raises the issue of how to raise the profile of cultural heritage more generally outside the more specialist fields of EIA and cultural heritage protection.

The responsibility for the EIA and production of the EIS generally lay with the project **proponent or developer**. Most proponents engaged a consultancy organisation to undertake the EIA and, in particular, prepare the EIS. Whilst best practice would dictate the use of cultural heritage specialists for assessment of the potentially wide range of cultural heritage issues to be addressed, it appeared that non-specialists from the wider EIA team were often used. This can lead to a reliance on desk studies, and little or only superficial appreciation of potential effects and thus a more limited assessment.

Decision-makers are required to consult specialist organisations to advise them when taking a decision on whether the project should proceed. Each jurisdiction provides for at least one expert body with cultural heritage responsibilities to be involved at this stage. Such involvement was usual but was frequently compromised by resources and workloads.

5.3 Conclusions and recommendations

Cultural heritage is an essential part of sustainability. It is both a non-renewable and valuable resource. Once the evidence of the past has been destroyed, it can never be replaced. It also has the potential to increase knowledge and is an excellent vehicle for wider educational objectives. Cultural heritage contributes strongly to people's sense of place and identity and, more widely, it has important social and economic roles for community development, regeneration, access, leisure and tourism. Such principles are internationally recognised in cultural heritage conventions, and they reflect broader environmental principles which the EIA Directive recognises in requiring coverage of the cultural heritage alongside, and integrated with, other environmental issues.

The 'quality' of treatment of cultural heritage in EISs was broadly positive in Rhineland, the Netherlands, the UK and Wallonia although variations were apparent. It seemed clear that the use of cultural heritage specialists in undertaking the assessments led to better quality outputs. Treatment of cultural heritage issues appeared to be better, and more thorough, in public sector projects than private sector developments. Thus, the evaluation of how cultural heritage was treated in EIA in North West Europe indicated some good practice, but also some difficulties. It should be recognised that most of the faults were not peculiar to cultural heritage, but were common to the assessment of other effects covered by the EIA process more generally. The evaluation of magnitude and significance was not always systematic

and the treatment of indirect and cumulative effects remained a problem. The difficulty of predicting and evaluating cultural heritage impacts, with their inherent uncertainty, contributed to these difficulties. There was also a failure to deal with the wider landscape setting and to consider people as receptors, despite the recognition of landscape issues at the site level and in policy.

Overall, it seemed that cultural heritage had a relatively low status as a factor in EIA in the countries studied, even though the protection of archaeological remains was provided for by legislation (for example, the French law of 1941). The strong focus of the various conventions and directives (see Section 2) on good practice to protect cultural heritage, and the integration of cultural heritage issues in wider planning, seemed to have received relatively low attention. The notion of preservation *in situ* had largely been adopted, but the integration of experts into EIA and planning, systematic consultation, and use of properly qualified specialists for assessments had been poorly implemented.

Consequently, each of the regional reports made several specific recommendations for improving practice within their particular jurisdictions. There are, however, broader, more over-arching recommendations of good practice that need to be taken into account in all countries to raise the profile of cultural heritage issues:

‘Process’

- Clear delineation of the study area and potential cultural heritage components during screening and scoping.
- Explicit attention to cultural heritage issues when considering alternatives within EIA.
- Development of systematic and consistent approaches and techniques for both valuing cultural heritage assets, and in the prediction of the magnitude and assessment of significance of cultural heritage impacts.
- Greater focus on the consideration of indirect and cumulative effects.
- Mitigation measures that are clear in terms of their detailed application and their likely effectiveness, with specific monitoring proposals as relevant.
- Guidance for various stakeholders in the process to promote cultural heritage, its importance and how it should be dealt with. The provision of both generic and sector specific guidance (e.g. highways) should be explored.
- Training on cultural heritage issues and the most effective means of integrating them into planning for both cultural heritage specialists and planners.

‘Substance’

- Clarity in terms of the exact meaning of cultural heritage in the context of each project, and the status of undiscovered archaeology.
- Determination of the scope and depth of research and field surveys at the outset of the assessment, but kept under review and updated as more information is obtained.
- Recognition of the cultural landscape as a more explicit element of the assessment process; links with biodiversity issues need to be explored, involving close co-operation between the nature and cultural heritage conservation authorities.
- Better integration with other topics in EIA using an interdisciplinary approach at all stages of the EIA process for a more holistic approach to assessing effects on the historic character of landscape and townscape areas as a whole.

‘People’

- Employment of appropriate cultural heritage skills as an essential ingredient of achieving high quality results in baseline studies, assessment, consultation and review of information in the EIS.
- Early participation of cultural heritage experts during screening and scoping in order to raise the profile of cultural heritage in EIAs.
- Frequent and full consultation with the public to achieve ‘engagement’.
- Increased sensitivity by specialists to the public’s broad interest in cultural heritage, even though it may not be forcibly expressed.
- Presentation of the findings of assessment of cultural heritage in ways that are accessible to the range of participants in the process.

More generally, when assessing cultural heritage within EIA procedures, the aim should be to:

- Minimise loss of and avoid adverse effects on an important aspect of the environment in which we live
- Ensure that cultural heritage is incorporated in spatial planning, social, economic, education and access strategies affecting the study area
- Improve understanding of cultural heritage and the contribution it can make to broader agenda
- Ensure that, where the cultural heritage cannot be preserved, appropriate investigation, recording and communication is undertaken.

These sets of recommendations are drawn together in ten guiding principles set out in Section 5.5.

Ultimately, the factors most likely to be important in ensuring good results are, ensuring appropriate survey, clear understanding of the effects of development, and a flexible, responsive approach to mitigation. The simple adherence to procedures and merely producing a large volume of paperwork is not enough. The true ethos of a good EIA for the cultural heritage – as for any other aspect of the environment – should thus encapsulate three core characteristics:

- **Rigour** – of research, analysis and assessment
- **Robustness** – of procedures, decisions and implementation
- **Reasonableness** – of obligations on developers and balancing the public interest.

Each of the regional studies produced specific recommendations for how improvements might be made, but all shared five common themes on how to promote good practice:

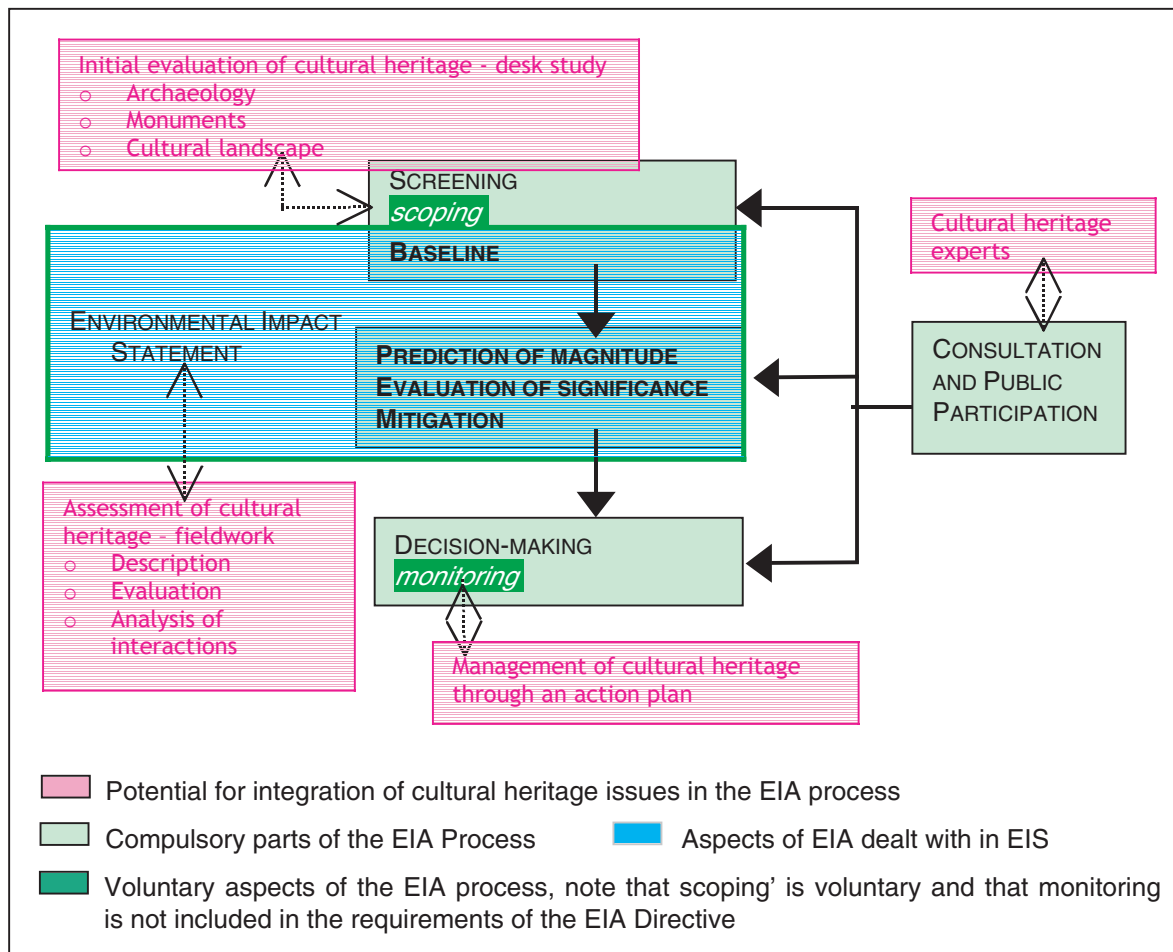
- Publication of professional standards and guidance
- Training
- Specific recommendations for stakeholder groups
- Further studies of key issues
- Learning lessons of EIA to develop principles for SEA.

The findings from the Planarch 2 study of a representative sample of EISs, other documentation and interviews with key stakeholders yielded a range of conclusions and recommendations of relevance to all the countries and regions involved. Figure 8 indicates how approaches to assessing cultural heritage can be integrated into the key stages of the EIA process to provide a consistent and systematic approach.

5.4 Strategic environmental assessment

The assessment of effects on cultural heritage at a more strategic level was not addressed specifically in this evaluation of North West Europe. Nevertheless, there is clearly a place for cultural heritage to be addressed in SEA, as is indicated by its potential role in judging which plans and programmes are to be evaluated, and in ensuring that information on cultural heritage is included in the subsequent report. The incorporation of cultural heritage in strategic planning would also assist in fulfilling the requirements of the Valetta Convention on cultural heritage being integrated at all levels of planning.

Figure 8: Integration of cultural heritage in the EIA process



Since the SEA Directive is in the early stages of implementation in the European member states, this provides an opportunity to embed cultural heritage in thinking at this level of planning and avoid the relative marginalisation experienced at the project EIA level. Aspects from this study on EIA may well apply to SEA and the issues of early engagement and consultation seem particularly relevant.

The Dutch, English and Rhineland studies (and to a lesser extent the Wallonia study) all identified a number of approaches that have potential to play a vital role in SEA as it develops. These include deposit modelling at various scales, historic or cultural landscape analysis and characterisation, the use of research agenda and frameworks, risk assessment methods and other more broad-spectrum strategic assessment techniques.

5.5 Guiding principles for cultural heritage in EIA

This analysis of a sample of EISs from North West Europe provided a unique opportunity to evaluate practice in the treatment of cultural heritage in EIA. Although there are clearly problem areas in the assessment of effects on cultural heritage, there are also instances of good practice and, importantly, common issues shared by a range of regions and countries. This study provides a platform to move forward and improve the treatment of cultural heritage in EIA, and also influence the integration of cultural heritage into the rapidly developing field of SEA.

The operational principles set out below are intended to provide a rigorous, robust and reasonable framework for ensuring that cultural heritage is appropriately treated in the EIA process. They are intended to guide all those involved in dealing with cultural heritage within the EIA process and are also broadly applicable to the SEA process.

Guiding Principles for Cultural Heritage in EIA

1. Cover all aspects of cultural heritage.
2. Integrate cultural heritage expertise into all stages of EIA, from screening through to implementation.
3. Describe the project requiring assessment clearly and in sufficient detail to allow identification of all impacts that could affect the cultural heritage.
4. Define a suitably large study area to allow a clear understanding of the cultural heritage and the extent of potential impacts upon it.
5. Undertake all cultural heritage surveys and investigations to a high standard so as to ensure a full understanding of the nature and significance of the resource and to allow informed decisions to be taken.
6. Assess all beneficial and adverse impacts on cultural heritage, including direct, indirect, temporary, permanent and cumulative effects.
7. Evaluate the significance of any impacts on the cultural heritage resource to take account of both the intrinsic value of the resource and how much it will be changed. Use relevant international, national and local legislation and policy to explain the significance, and make explicit the basis for any statements concerning value or importance.
8. Consider the likely effects on cultural heritage assets of alternative scenarios, including doing nothing.
9. Consider a variety of approaches to mitigation, including design modification, appropriate investigation and recording measures. Make provision for unforeseen effects. Propose realistically achievable mitigation measures and fully monitor and document any agreed actions, including responsibility for their implementation.
10. Ensure all communication relating to cultural heritage in EIAs is clear, focused and accessible to the non-specialist. Archive and index all documentation in a clearly traceable manner.

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7. APPENDICES

7.1 Phase 1 reports

The full titles of the phase 1 study reports for the participating regions/countries in the Planarch study on cultural heritage and environmental impact assessment in North West Europe are set out below, and copies are available on the Planarch website at www.planarch.org

FLANDERS

The Environmental Impact Assessment Procedure and Archaeological Heritage Management in Flanders: Past, Present and Future, Erwin Meylemans (Flemish Heritage Institute), Sam De Decker and Els Hofkens (Department of Monuments and Landscapes), August 2005

FRANCE

Legislation and EIA regarding Cultural Heritage in France, Gertrude Blancquaert and Laurent Sauvage (Institut National de Recherches Archéologiques Préventives), July 2005

GERMANY

Protection of the Cultural Heritage within EIA: Evaluation of Plans during the Consultation of the Rheinisches Amt für Bodendenkmalpflege - Effectiveness Regarding the Consideration of the Cultural Heritage and, in particular, of the Archaeological Heritage, Peter Burggraaff, Benjamin Hoeke, Klaus-Dieter Kleefeld, Thorsten Korn (University of Koblenz), March 2005 [Project co-ordination: Nora Andrikopoulou-Strack, Elmar Knieps; Consultant: Rainer Graafen]

NETHERLANDS

Evaluation of Cultural Heritage in EIA: Focus on the Future, Bert Groffen, Martijn ten Klooster, Mariëlle de Sair (Haskoning Nederland Bv, Ruimtelijke Ontwikkeling), November 2004

UNITED KINGDOM

A Review of Cultural Heritage Coverage in Environmental Impact Assessments in England, George Lambrick and Jill Hind, with Gill Hey and Klara Spandl (Oxford Archaeology), May 2005

WALLONIA

Impact Studies and Consideration of the Natural Heritage, Marie-Jeanne Ghenne and Martine Soumoy (Ministry of the Walloon Region), August 2005

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