



Times *they are a changing!*

Linking our activities to the sustainable development agenda

Following wide consultation SNIFFER has extended its remit to align its activities with the sustainable development agenda. The scope of activities has broadened from a largely environmental focus to include people at the heart of environmental policy. SNIFFER's stated aim is to increase knowledge to help protect our environment and improve quality of life.

SNIFFER's approach involves working in partnership to commission and manage research, as well as creating opportunities for managed dialogue and knowledge sharing through workshops and events.

This newsletter outlines some of the ongoing and developing work areas of the company.

SNIFFER Membership

The 2006-07 financial year is also the first in which a new funding model has been applied, which aims to make membership of SNIFFER more attractive and affordable to a wider range of organisations.

The model has already successfully attracted a number of new members (see table 1) and, it is hoped, that in turn will generate increased project activity.

Enquiries are most welcome from other organisations interested in exploring how membership could benefit their research and dissemination needs.

SNIFFER outputs

Below is a summary of reports published during 2006. Further details can be found by searching on our website www.sniffer.org.uk using the report code shown at the start of each line below. Details of other SNIFFER activities are described elsewhere in this newsletter.

LIST OF FINAL REPORTS CIRCULATED FROM JANUARY 2006 TO NOVEMBER 2006

Ref	Title	Ref	Title
CC03	A Handbook of Climate Trends Across Scotland	WFD19	Screening Tool to Identify and Characterise Diffuse Pollution Pressures - Phase 2
FRM02	Broad Scale Ecosystem Assessment Scotland (BSEA) Toolbox 1	WFD27	Aquifer Parameters Manual for Geology Present in Scotland - Phase 1
UE3(05)UW5	Retrofitting Sustainable Urban Water Solutions	WFD34	Assessment Techniques for Quaternary Deposits in the UK
UKCC01	Methodology for Use by Staff Assessing Impacts on Human Health Associated with PPC Licensing - Training Seminars	WFD38	Development of Phytoplankton Classification Tool for Lakes and Slow Flowing Rivers
UKCC05	Guidance on the Application of the Precautionary Principle: Overview and Practical Guidance Documents	WFD41	Classification Tools for Coastal and Transitional Waters
UKCC10	Assessing the Benefits of Flood Warning	WFD42	Development of Technique for Lake Habitat Survey (Phase 2)
UKCC15	Investigation of the Efficacy and Cost Benefits of Satellite, Radio, and Other Relevant Modern-technology Communication Media for Remote Data Collection in Scotland and Northern Ireland	WFD48	Development of Environmental Standards (Water Resources)
UKPIR03	Extension of the UK Air Quality Classification Scheme: Scoping of Options	WFD49	Development of Environmental Standards (Morphology)
UKPIR07	Intensive Pig Installations Subject to PPC Regulation Case Study	WFD49C	Validation of Typology Work
UKRSR03	Assessing the Suitability of Controlled Landfills to Accept Disposals of Solid Low-level Radioactive Waste	WFD54	Development of a Decision Making Framework and Methodology to Determine Effectiveness of Combinations of Measures for WFD
UKW05	Landfill Stabilisation and Completion under the Landfill Directive: Development of a User Interface for Model	WFD62	Wetland and Groundwater Interactions
WFD01	Development of a GIS Based Inventory of Standing Waters for England, Wales and Scotland, Together with a Risk Based Prioritisation Protocol - Phase 2	WFD69	Links and Interactions Between the RBMPs and Development Plans
		WFD72B	Development of Scientific Rationale and Formulae for Altering RIVPACS Predicted Indices for WFD Reference Condition
		WFD75	Application of the WFD Exemption Tests to New Hydropower Schemes Likely to Result in Deterioration of Status
		WFD77	Screening Tool to Identify and Characterise Diffuse Pollution - Phase 3



Ruth Wolstenholme
M.D. SNIFFER

SNIFFER is in the process of a far reaching change programme that will affect both the way in which it works and the way in which it is funded. Among the key strategic changes taking place is the establishment of an Expert Advisory Group (EAG) which will assist SNIFFER in being aware of new connections and opportunities, and ensure that our work is relevant to a wider range of stakeholders. Participation on the EAG will provide the opportunity to network, to influence SNIFFER's strategic direction and to inform policy, tools and guidance.

Current members of the group are as follows:

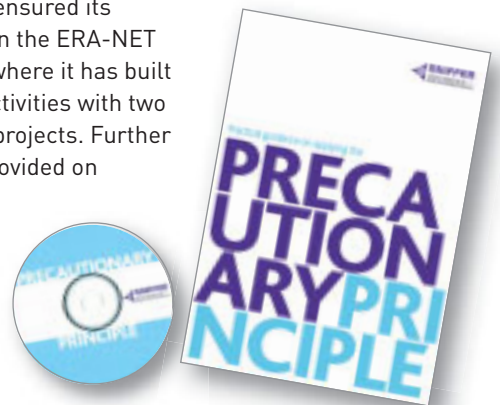
- **Diana Wilkinson**
(Chief Researcher, Scottish Executive)
- **Evan Williams**
(Head of sustainable development unit, SEPA)
- **Wesley Shannon** (Director EPD DOE)
- **Dave Foster**
(Head of Water Management Unit, EHS)
- **Andrew Llanwarne**
(Director Special Projects, Scottish Enterprise)
- **Maf Smith**
(Director Sustainable Development Commission Scotland)
- **Sharon Turner**
(Professor of Law, Queens University, Belfast)

The Expert Advisory Group seeks to develop longer term priorities and strategies that will position SNIFFER where it needs to be to meet the future requirements of an expanding network of stakeholders.

A move from themes to topics

Reflecting the cross-cutting nature of modern research and the mainstreaming of human health protection with its agenda; SNIFFER has moved from the historical "theme-based approach" – single issue research - to one involving a range of topic areas. Each of these will contain a portfolio of cross cutting programmes, projects and initiatives in which stakeholders can become involved.

European legislation remains one of the main drivers for domestic environmental policy and with member countries sharing many common research needs, the ERA-NET programme was developed as a means by which to identify and implement research that would benefit all members, reduce duplication and through co-operation improve the quality of the work undertaken. It is not surprising therefore that SNIFFER's expertise in partnership working has ensured its involvement in the ERA-NET programme where it has built on existing activities with two new era-net projects. Further details are provided on page 4.



Despite these changes, SNIFFER continues to deliver core ongoing work areas such as that of the Environmental Regulation programme, working closely with SEPA, EHS and other partners. The UK research programme has delivered several practical tools, including for example, practical guidance for environmental and health regulators on the application of the precautionary principle available to download at www.sniffer.org.uk/search.asp [search on SNIFFER code UKCC05]

List of Members (table 1)

Scotland	Northern Ireland	Irish Republic
Scottish Executive	Environment and Heritage Service	Environmental Protection Agency
Scottish Environment Protection Agency	Environmental Policy Division, DOE	
Scottish Natural Heritage	Rivers Agency	
Forestry Commission		

SNIFFER widens its role in Europe



Taking the lead on ERA-NET

Representing a major achievement for SNIFFER is its appointment as Project coordinator of the Urban-Net.

*URBAN-NET is a €3 million 4 year
research programme involving
16 partners in 14 countries*

The project aims to structure and coordinate research on urban sustainability in Europe by identifying and addressing trans-national requirements for research and sharing of good practice. It will also help coordinate urban research in Europe through mutual research programmes and joint planning of associated activities. Its ultimate goal is to achieve jointly funded and managed research activities on urban sustainability by a number of European funding partners.

In practical terms, SNIFFER will co-ordinate and deliver:

- a basis for disseminating the outcomes of existing urban research initiatives;
- a searchable, website-based database of urban research programmes in Europe;
- cross-cultural comparisons of recent urban research;
- a structured trans-national expert evaluation of research;
- one pilot and at least one further full joint call for research proposals funded by multiple countries, leading to sustainable, trans-national cooperation.

The contract was awarded to SNIFFER in August 2006. SNIFFER recently hosted the first Steering Group meeting of all the partners at the National Museum of Scotland. Two new members of staff have been appointed to work alongside Research Manager Elliot Robertson. They are Paul Sizeland, Project Manager and Rachel Peacock, Project Administrator. Further details are provided in the New Additions to the SNIFFER Team section.





Partnering the IWRM ERA-NET

SNIFFER is also involved in a second new ERA-NET initiative - the Integrated Water Resource Management eranet, 'IWRM ERA-NET', which is led by the International Office of Water in France. SNIFFER is managing work package 2, the aim of which is to collate short and medium term research needs across Europe.

By 2010, IWRM.Net will be established as:

- **THE** source for knowledge about IWRM-research being undertaken in Europe at Members States level, with a focus on the Water Framework Directive (WFD);
- A forum for prospective co-ordination and collaboration of research needs and programmes on water related management in different countries, including accession states and EU neighbours;



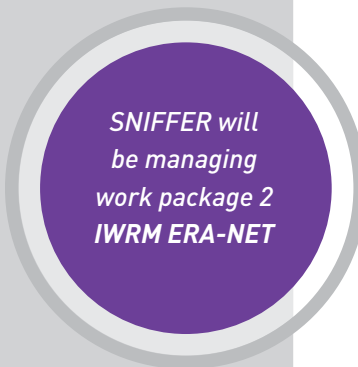
- The facilitator between research, water policy makers and managers to bridge the communication gap;
- A facilitator for bringing together researchers and funders from different countries to work on joint research programmes;
- A forum for exchanging best practice on administrating research programmes across Europe.

Stephen Midgley has been appointed as IWRM Work Package Two Project Coordinator and will work alongside Research Manager Kirsty Irving on this 3 year project.

Other ERA-NETS in which SNIFFER is involved

SNOWMAN – supporting the sustainable management of soil and groundwater pollution. SNIFFER is a member of the UK Steering Group for this programme and is contributing funds towards a pilot call for European research through this network.

CRUE – a network of flood risk management research funders. SNIFFER is supporting the Scottish Executive, which is a partner in this network.



Workshops and seminars attract ministerial support

An illustration of SNIFFER's effectiveness as a knowledge broker and catalyst for partnership working can be seen in the success of its workshops and seminars. These attract a wide spectrum of interest from policy makers, environmental specialist, planners who implement policy and increasingly, health and social science practitioners. SNIFFER has also been successful in attracting support from Ministers and Permanent Secretaries in Scotland and Northern Ireland who gave keynote speeches to open a number of our events.

Business & Biodiversity – Scotland

The first of two events on this subject was organised in partnership with the Business Environment Partnership (BEP). The Edinburgh event saw the joint launch of SNIFFER's publication *Business and Biodiversity: Assessing the Practical Benefits to Business* and BEP's Business and Biodiversity Initiative.

The Edinburgh event was attended by representatives from business, government departments and environmental organisations who heard Scotland's Deputy Environment Minister Rhona Brankin stress that *"Scotland's biodiversity is one of our greatest assets and is irreplaceable. We all have a part to play in looking after it. Biodiversity is too big and important an issue for any of us to tackle in isolation. It is encouraging to see businesses recognising the opportunities and benefits in looking after biodiversity – this is illustrated by the launch here today."*

Business & Biodiversity –Northern Ireland



Bob Brown from the Northern Ireland Biodiversity Group chairing the Business and Biodiversity seminar in Belfast

A second event organised by SNIFFER, Invest Northern Ireland and Environment and Heritage Service was held in Belfast and presented a Northern Ireland perspective on Business and Biodiversity. The audience listened to presentations from

environmental experts and examples of the business benefits of supporting biodiversity were outlined in two local case studies featuring the Lagan Group and Belfast City Airport.



Copies of the SNIFFER case study publication and the full technical report featuring the results of the research programme can be obtained in PDF format from www.sniffer.org.uk/search.asp (search code UKCC04).

Environmental Justice



Stephen Peover

In Northern Ireland, Stephen Peover, Permanent Secretary Department of Environment, opened a SNIFFER workshop in Belfast on Environmental Justice. During his speech he encouraged the 44 delegates, drawn from a wide range of

government departments, to work together and build upon experience from around the UK in developing the concept for Northern Ireland.

The event was organised and facilitated at the request of the Environmental Policy Group of Northern Ireland's Department of the Environment, and featured speakers from government and academia across the UK, who presented their views on the challenges and opportunities for addressing environmental justice.

Flood risk management research

The ability to combine research management with effective knowledge exchange was highlighted at a very successful 'Flood risk management' (FRM) research seminar attended by 150 delegates and supported by the Scottish Executive, SEPA, Scottish Water, the SCOTS Group and Scottish Environment Link. The seminar aimed to:

- disseminate and raise awareness of recent research outputs of relevance to Scottish practitioners and stakeholders; and
- identify the training needs of Scottish practitioners and stakeholders.

Opening the event, Rhona Brankin confirmed her belief that the success of this service is fostered by the partnership working encouraged by SNIFFER, which actively involves Scottish stakeholders in the development, funding and delivery of flood risk management research in Scotland. Ms Brankin announced that the Scottish Executive's intended to fund a two year extension (from August 2006) to the service SNIFFER provides. She noted that new research proposals were being taken forward by SNIFFER including:

- Development of a methodology (and responsible parties) for capturing data after a flood event in Scotland.

With a high demand for places and very positive feedback from those who attended, it has been agreed that this will be annual event. The 2007 FRM Conference will be held on 27 February – for further information visit www.sniffer.org.uk/rise/events.asp



Ian MacNab of Glasgow City Council speaking at the flood risk management conference



Scotland's Deputy Environment Minister Rhona Brankin was key note speaker at two SNIFFER seminars during 2006

Highlighting the importance of soil

The EU Thematic Strategy on Soils is likely to lead to the introduction of a Soil Directive, which will have implications for the way in which soils are protected and monitored across the EU. Raising awareness and partnership working were the focus for a consultation process that formed the final stage in the SNIFFER project entitled "Indicators of Soil Resilience for Scotland and Northern Ireland".

The workshop brought together thirty delegates with an expertise in soils science and policy from Scotland and Northern Ireland, to review and validate a set of indicators developed by the Scottish Agricultural College (SAC) under contract to SNIFFER.

Participants were asked to provide their views to support the inclusion or exclusion of proposed biological, physical and chemical indicators measuring soil quality, resilience and resistance, for the soil function of environmental interaction. A number of valuable recommendations were adopted and the results of the workshop directly informed the final SNIFFER report, which is available on the SNIFFER website: www.sniffer.org.uk/search.asp (search code LQ06).

Northern Ireland Soils Workshop

Soil also formed the focus of a successful workshop held in Belfast. Representatives from across the public sector came together to explore the wider issues of soil quality, current regulation and how these could be better understood and implemented within the Province.

Overall the event, supported by the Environment and Heritage Service and the Department of the Environment for Northern Ireland proved to be beneficial to all who attended; providing a wide range of organisations with an insight into soil issues and activities.

Climate change

Scottish Climate Change Impacts Partnership (SCCIP)

SNIFFER is responsible for coordinating SCCIP, a partnership working to identify current initiatives and bring together expertise and experience from Scottish stakeholders to address the 'adaptation' side of the climate change challenge. SCCIP's mission is:

"to increase the resilience of organisations and infrastructure in Scotland to meet the challenges and opportunities presented by the impacts of climate change"

The inception of the Partnership and its first year of activities have been supported by the Scottish Executive and guided by the experienced hand of the UK Climate Impacts Programme (UKCIP). A range of partners including the Sustainable Scotland Network (SSN) and SEPA has also been closely involved in SCCIP's activities this year. These have included two workshops, one to inform the UK's Adaptation Policy Framework, the second being the climate patterns event described in more detail below. A key aim for SCCIP is capacity building; SNIFFER is working with the SSN chaired development group supporting local government action and UKCIP in bringing their sector specific support tools to Scotland. It is planned that 2007 will see SCCIP events addressing the adaptation challenges to both the business and transport sectors, as well as the launch of the new SCCIP website.

Climate Change Patterns in Scotland

A seminar was held in Edinburgh on two key pieces of work which will inform adaptation and responses to the impacts of climate change in Scotland. These are:

- The launch of a new handbook of climate trends in Scotland designed to aid adaptive strategies in response to the impacts of climate change
- A workshop giving Scottish stakeholders a chance to communicate their requirements from the UKCIP 08 climate change scenarios package and to consider how this new dataset will be used in decision making.

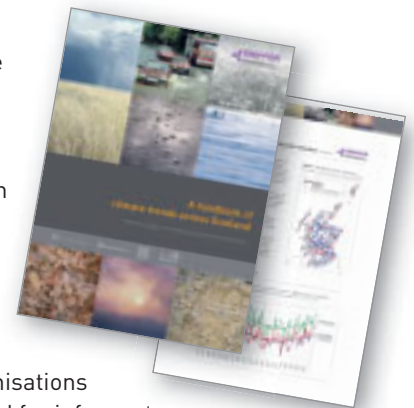
Never far from the headlines, Climate change has become one of the greatest challenges for policy makers, environmentalists, business and the community.

The keynote speech was given by Professor Maggie Gill, Head of Science and Analysis Group at the Scottish Executive, who introduced speakers representing Scottish Natural Heritage, Scottish Environment Protection Agency, ADAS, UK Climate Change Impacts Partnership, the Scottish Climate Change Impacts Partnership and the Met Office Hadley Centre.

SNIFFER's handbook "Climate change patterns across Scotland" is a concise summary of a more detailed technical report both of which can be found at www.sniffer.org.uk/search.asp (search code CC03).

The handbook presents the outcomes of a detailed examination of how the climate has changed over the last century. It has been carefully structured to be user-friendly with clear geographical information and data sets to provide stakeholders such as local authorities and other organisations with the information needed for informed adaptive strategies. An online version of the handbook, providing all the findings of the printed version with the increased flexibility and ease of access of a website was launched on the SNIFFER site in December 2006.

www.sniffer.org.uk/climatehandbook



The second half of the event was a UKCIP next workshop which debated a range of questions central to developing the next set of UKCIP scenarios, expected in 2008, to maximise their utility to the many groups who will use these vital resources. The issues discussed included: which possible time-slice durations and baseline period should be used; possible levels of spatial aggregation; and the differing vulnerabilities and risk thresholds of diverse sectors to climate impacts. The workshop discussions resulted in a range of suggestions, which reflected the varying needs of stakeholders.

Facilitating **change** through **Knowledge exchange**

Successfully transferring research outcomes into action means engaging with and informing decision makers, using relevant messages and language that is understood by non-specialists.

Over the next few years, SNIFFER plans to focus more of its resources in this area and to work with our membership to help disseminate the outcomes of our research to specialist, administrative and strategic staff. SNIFFER is also investigating ways in which it can support a wider role of translating research outputs into something that can be understood and built-into the planning processes of policy makers, regulators, local government and public services, business, with a key aim to be ultimately taken-up by a wider audience.

Web Based Initiatives

In addition to expanding its stakeholder engagement programme SNIFFER will enhance its knowledge exchange through a growing presence on the internet. 2007 will see the start of a complete revamp of the existing SNIFFER web site www.sniffer.org.uk, which will be transformed into a user-friendly, easily updated, information portal to showcase our work with partners and provide links to other sources of information.

Current SNIFFER web based services include:

RISE

The Research Information Service for Flood Risk Management web site www.sniffer.org.uk/rise is hosted within the SNIFFER web site. Managed on behalf of the Scottish Executive, the site is a key research and knowledge management tool which underpins the delivery of SNIFFER's flood risk management (FRM) service to Scottish stakeholders.



Visitors to the RISE web site have reached as high as 8,000 in a single month

Visitor traffic to the web site has grown significantly and at the time of the first Flood Risk Management seminar in February 2006 (see pages 6 and 7) visitor numbers hit 8,000 in one month.

WFDVisual.com

Following the successes of the first phase of the development of a WFD Visualisation Tool, SNIFFER is now managing the development of web site at www.wfdvisual.com to provide search and download facilities for around 1,000 existing images relevant to groundwater processes and related pressures, and provide a central resource for future images that could cover all aspects of WFD.



www.wfdvisual.com will provide search and download facilities for around 1,000 existing images relevant to groundwater processes and related pressures

Developed to make complex features associated with groundwater easily understandable, the images are aimed at both technical groundwater specialists and 'non-specialists' such as planners, water managers and the general public.

Future Developments

Climate Change Handbook

A new SCCIP web site will be in place in early 2007 and one of its first functions will be to provide a complete HTML version of summary handbook "Climate change patterns across Scotland" including downloadable versions of the charts and tables that make up much of the reports content.

URBAN-NET Website - www.urban-net.org

Discussions are also underway to develop a new web site during 2007 focussing on the URBAN-NET programme. This will be developed in partnership with SNIFFER's Dutch URBAN-NET partner the Nicis Institute.

Additions and changes to the SNIFFER team

As this newsletter highlights, SNIFFER is under-going considerable change in its research focus, its stakeholders engagement and its new staff.

Two key appointments have been made to expand the business team within SNIFFER.

Diane Foster, who is based in Northern Ireland, has moved from a co-ordination role into business development whilst in Scotland, **Trevor Elliott** has been appointed Business Development Manager. These two staff, working in conjunction with Managing Director Ruth Wolstenholme, will spearhead the drive for increased membership, new sources of funding and other avenues to support SNIFFER's core activities.

His background is in forestry and he recently had a brief spell coordinating UK input to two ERA-NET forest research programmes. Rachel is the Urban Era-Net Project Administrator responsible for the financial management and administration. She has previously worked in corporate banking with The Alliance & Leicester Bank and with various private sector and charitable companies, most recently Scottish Human Services Trust.

Stephen Midgley has also joined SNIFFER as project coordinator for Work Package two on which SNIFFER leads within IWRM-Net. Stephen's previous post was with the Scottish Coastal Forum overseeing the launch of the SCF strategy in 2004 and supporting the SCF role on the Ministerial Advisory Group for marine and coastal strategy.

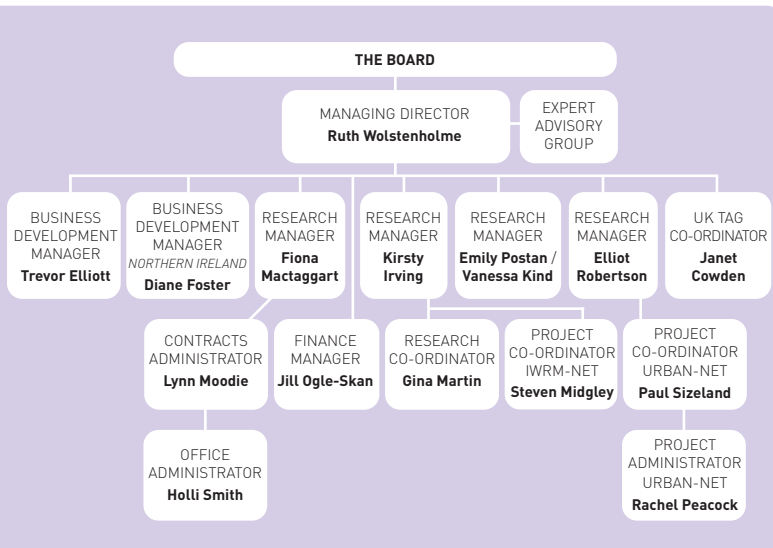
As many of you will already know, **Vanessa Kind** has been on maternity leave for most of 2006 and her work is being handled by **Emily Postan**, who has been seconded to SNIFFER for twelve months. Emily, who is responsible for leading on climate change and land quality areas within SNIFFER, was previously working as environmental justice coordinator within the Scottish Executive's Sustainable Development Directorate. Vanessa returned to SNIFFER in January 2007.

It is with much regret that SNIFFER and UK TAG say a fond farewell to **Jean Erbacher**. Jean, who as UK TAG Co-ordinator, has been the link between the UK Technical Advisory Group and those involved in the implementation of the Water Framework directive, has stepped down from her post and is succeeded by **Janet Cowden**. Janet, is an experienced programme manager who comes to SNIFFER and UK TAG from Thirdwave Ltd, Edinburgh where she worked as the Scottish Industrial Symbiosis Programme Manager. She has previously worked in Scottish Water, Scottish Water Waste Services and the US EPA.

Last but by no means least, SNIFFER said goodbye to **Megan Watkins**, who has tirelessly performed the role of SNIFFER's Administrative Assistant for the last 18 months. She is succeeded by **Holli Smith** who joined SNIFFER after completing an HNC in Social Science and has experience working in a range of public sector organisations.

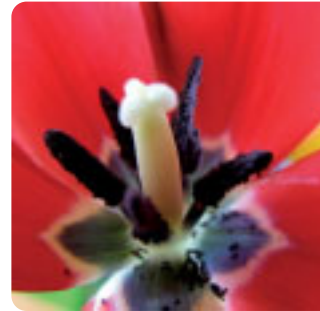
The move to new topics is also being supported by the appointment of additional research managers including **Elliot Robertson** who heads the Urban, Environment and Sustainable Communities area. Elliot replaces **Tom Wild** who left to join the South Yorkshire Forest Partnership. Before joining SNIFFER, Elliot was responsible for sustainable communities' policy development at the Environment Agency, with particular focus on resource efficiency and environmental impact in the built environment. He was co-secretariat for the government's Sustainable Buildings Task Group.

Elliot will also have overall responsibility for the SNIFFER led Urban Era-Net project where he is working with two new staff members **Paul Sizeland** and **Rachel Peacock**. Paul manages the Urban ERA-NET project. He previously worked for SEPA for four years as Senior Business Consultant leading on operational and strategic planning projects.



Photographic Competition

“Our Environment up close”



Whilst media coverage of environmental problems increasingly has a global focus, the solutions often rest with local initiatives. By looking up close it is often easier to engage people in these issues.

So the theme of SNIFFER's photographic competition is 'Our Environment up close'. The images can represent positive environmental subjects and illustrate how beautiful things can be up close or they can be negative, showing the impact of environmental threats.

How close will be left up to the entrant's imagination and skill. A few examples to stimulate the creative juices can be found on this page.

Entries are welcome from everyone and images can be conventional film based or digital. Prints should be no larger than 10 x 8" and digital images should be up to 300 dpi and no larger than 1MB in size. 35mm or 6 x 6cm transparencies will be also be accepted and all images are sent at owners risk.

An entry form and copy of the competition rules and conditions can be obtained by emailing sniffer@sniffer.org.uk.

Entries will be accepted in both conventional and digital formats.

Closing Date for Entries

Entry forms and photographs must be received by 28th February 2007.



FIRST PRIZE:

Apple 30GB iPod

Play your favourite music, podcasts, audiobooks, photos, TV shows, movies, videos and games. The 30GB memory holds up to 7,500 songs, up to 25,000 photos, and up to 40 hours of video - or any combination of each.

Plus a 21 x 28" canvas print of your winning photograph



SECOND PRIZE:

SAMSUNG D73 Digital Camera

The ideal holiday companion, this 7.2 million pixel Samsung digital camera is easy to use, with a USB connection to transfer photos to your PC. Features include an ergonomic grip that helps get steady shots every time, large 2.5" LCD screen, 3x optical zoom, 5x digital zoom, complete with 1 GB memory card.

Plus a 16 x 12" canvas print of your winning photograph



THIRD PRIZE:

Velbon Cx Mini Tripod

Weighing just 790g the Velbon Cx mini is the ideal compact, lightweight companion for SLR cameras, compacts and smaller camcorders. When folded it is just 30cm in length, but extends to a useful 64cm, so it can be used as a table top model or from ground level. It can be carried everywhere as part of a camera outfit - ready for use at a moment's notice. It features 3 section legs, each with quick locks, centre bracing for maximum stability and is fitted with a 3 way panhead with quick release platform. A lockable sliding column provides precise adjustment for the close-in shots.

Plus a 8 x 8" canvas print of your winning photograph

