Assessment & Learning in Practice Settings (ALPS)
Centre for Excellence in Teaching & Learning (CETL)

Operational Plan (*revised November 2006*)
December 2006 - July 2008

The ALPS Operational Plan should be read in conjunction with the ALPS Strategic Plan (*revised November 2006*)
http://vkp.leeds.ac.uk/Drive/gotodoc.jsp?doc=576823

and the ALPS Operational Plan Timeline (*revised November 2006*)
http://vkp.leeds.ac.uk/Drive/gotodoc.jsp?doc=576839

This document is the ALPS Operational Plan and will deliver the six strategic aims of the ALPS Strategic Plan:
  A1. to develop and improve assessment and thereby learning in practice settings for all health & social care students
  A2. to develop the competence of people who support and assess health and social care students in practice settings
  A3. to enhance the role of service-users and carers in assessment and learning in practice settings
  A4. to develop effective project management, evaluation and partnership working
  A5. to research and disseminate assessment practice
  A6. to respond to and influence national and international policy and culture in assessment

Partners will develop their own Operational Plans to implement the programme of work within their own institution. The Joint Management Group has overall responsibility for the delivery of the ALPS Operational Plan.

Points to note:
  • The Operational Plan addresses all three Phases of the ALPS programme. The original Phases were staged running consecutively. ALPS is now beginning to transform practice and embed activities. Consequently the Phases have been revised:
    - Phase 1 Descriptive & Developmental – years 1 - 3
    - Phase 2 Transformative – years 2 - 5
    - Phase 3 Evaluative & Embedding – year 3 onwards

  • All target dates are set at the end of a month.

The next review of the Operational Plan will take place at Easter 2007 and then again around November 2007.

ALPS Operational Plan – December 2006 - July 2008

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Target date	Lead
A1. Aim: to develop and improve assessment and thereby learning in practice settings for all health & social care students **Outcome:** health & social care students graduate from courses fully equipped to perform confidently & competently at the start of their professional careers	A1.1 Map core/generic competences across all partners' under-graduate and pre-registration health & social care courses	a. Communications skills map produced	a. Detailed analysis of communication skills. Common standards identified and agreed up to point of registration. Mapping of definitions & performance criteria	a. December 2006	**a. CCMWG**
		b. Revisions to map incorporating feedback from assessors, students & service users & carers	b. Communication skills consultation undertaken involving assessors, students, service users & carers	b. by May 2007	**b. CCMWG**
		c. Tools Group to agree what & how to embed in formative assessment of communication skills, & explore where might be used in summative assessment	c. Analysis of feedback from consultation. Recommendations submitted to Tools Group.	c. April 2007 onwards	**c. CCMWG**
		d. Teamworking competency mapping underway	d. CCMWG start teamworking mapping	d. February 2007	**d. CCMWG**
		e. Teamworking skills map produced	e. Consultation exercise undertaken by PSIGs	e. April 2007 onwards	**e. PSIGs**
		f. Tools Group to agree what & how to embed in formative assessment of teamworking skills, & explore where might be used in summative assessment	f. Analysis of feedback from consultation. Recommendations submitted to Tools Group.	f. May 2007	**f. Tools Group**
		g. Ethical practice	g. CCMWG start ethical	g. May 2007	**g. CCMWG**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Target date	Lead
		competency mapping underway	practice mapping		
		h. Ethical practice skills map produced	h. Consultation exercise undertaken by PSIGs	h. ?July 2007	**h. CCMWG**
		i. Tools Group to agree what & how to embed in formative assessment of ethical practice skills, & explore where might be used in summative assessment	i. Analysis of feedback from consultation. Recommendations submitted to Tools Group.	i. ?September/October 2008	**i. CCMWG**
		j. Identify other possible areas for further mapping of additional generic competences	j. JMG to discuss	j. September 2007	**j. JMG**
	A 1.2 Consult & identify effective practice in work-based learning and assessment across partnership. Enhance validity & reliability of assessment tools	a. Literature review & practice survey provide evidence base by which to identify effective practice & tools	a. Specification for & commissioning of literature review	a. February 2007	**a. BORG**
		b. Recommendations received by Tools Group	b. Literature review completed & recommendations made to Tools Group	b. March 2007	**b. BORG**
		c. Tools Group agrees basis against which effective practice & tools identified	c. Synthesis of competency maps, effective practice & mobile technologies	c. April 2007 onwards	**c. Tools Group**
	A.1.3 Develop a Virtual Assessment Environment (VAE) & range of reusable assessment resources	a. VAE specification agreed	a. ITG & partners agree specification ensuring practice-based assessment, learning & teaching, partner institutional strategy requirements are taken into	a. December 2006	**a. ITG/MTPM**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Target date	Lead
			account		
		b. Procurement completed	b. Procurement exercise undertaken, contracts awarded & services delivered	b. March 2007	**b. ITG/MTPM**
		c. Implementation strategy developed	c. Implementation strategy will address: - development of resources & services as informed by educationalists & practice - appropriateness of delivery method - use of pilots to test proof of concept - developing partner infrastructures - developing interfaces to accommodate practice-setting infrastructures - training & on-going support of users - embedding of mobile technologies - review of services provided - sustainability	c. June 2007 onwards	**c. ITG/MTPM**
		Once the procurement exercise has been completed a full implementation strategy will be developed providing more detail			
	A1.4 Develop and pilot assessment 'tools', standards and framework for assessing generic competences in practice across partnership	a. Tools, standards and framework developed and agreed as reliable and valid by practice assessors/ service users & carers/students/tutors/ /PSRBs/HEIs	a. Identify & develop learning & assessment electronic tools - formative & summative - in conjunction with CCMWG & partners incorporating effective practice, ensuring they are appropriate to electronic	a. May 2007 onwards	**a. Tools Group**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Target date	Lead
			delivery		
		b. A range of practice based assessment tools are piloted, evaluated & reported, with recommendations, to JMG	b. Pilot tool (aligning pilot sites with assessors, service users, carers & students) with interprofessional formative assessment experience) via: • partner workshops • consultations with professions & students • external reviews	b. August 2007 onwards	**b. PSIGs/Tools Group/RG**
		c. JMG provides recommendations for partners to implement formative assessment using evaluated tools	c. JMG considers evaluation Group report & makes recommendations	c. *?March 2008*	**c. JMG**
	Modification & revalidation of modules & course components	d. Students formatively assessed using multiple judgements by different assessors in a large sample of diverse practice situations, improving confidence, competence, assessment validity, reliability & inter-professional working skills	d. PSIGs support process to introduce & embed changes to curricula ensuring that work on common competencies, use of effective practice, tools, mobile assessment, involvement of service users, carers, peer & self assessment are incorporated	d. May 2008 onwards	**d. PSIG**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead
A2. Aim: to develop the competence of people who support and assess health and social care students in practice settings **Outcome:** health & social care professionals, and students are trained as scholarly assessors in ALPS methods of assessing professional competences	A2.1 Enable health & social care professionals, to acquire higher levels of knowledge & skills about adult learning theory & practice based assessment	a. 25% - 50% of existing health & social care practice based assessors receive update training which includes ALPS developments	a1. provide programmes of training and dissemination events for practice based assessors using existing HEI partners' expertise a2. provide learning materials to support & train staff a3. H&SC professionals carry out learning and assessment research a4. explore awarding of credits by professional bodies for trainers	a. December 2006-August 2007	**a1. PSIGs** **a2. ACT/PSIGs** **a3. PSIGs** **a4. ACT**
		b. All new mentors/assessors receive up to date information & training from ALPS	b1. provide programmes of training and dissemination events for practice based assessors using existing HEI partners' expertise b2. provide learning materials to support & train staff b3. H&SC professionals carry out learning and assessment research	b. December 2006-August 2007	**b1. PSIGs** **b2. ACT/PSIGs** **b3. PSIGs**
		c. 100% of all existing & new staff receive up to date information & training from ALPS on an annual basis	c1. provide programmes of training and dissemination events c2. update learning materials to support & train staff c3. H&SC professionals carry out learning and assessment research	c. September 2007 onwards	**c1. PSIGs** **c2. ACT/PSIGs** **c3. PSIGs**
	A2.2 Collaborate with NHSY&H mentor/assessor support	a. Common approach to assessor/mentor training established	a. Active involvement of all partners in NHSY&H mentor/assessor	a. December 2006 onwards	**a. PSIGs**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead
	initiatives to ensure best fit with HEI activities		initiatives		
		b. Qualification and progression framework agreed and established between NHSY&H and HEIs	b. Consult with professions not covered by NHSY&H scheme and agree how to progress	b. June 2007	**b. JMG**
	Range of practice placements extended as increased number of multi-professional assessors	c. Qualifications in mentorship, practice education & assessor training become multi-professional & these assessors become the norm	c1. Review and adapt existing courses c2. Development of new assessor/mentor modules/courses. c3. Promote multi-professional take-up to modules/courses	c1. June 2007 c2. December 2007 c3. January 2008	**c1. PSIGs** **c2. PSIGs** **c3. PSIGs**
		d. Mobile technologies improve assessment & learning	d. Mentors/assessors trained on the use of mobile technologies as a tool to support student learning & undertake formative & summative assessment	d. January 2008 onwards	**d. PSIGs**
	A2.3 Offer staff appropriate development opportunities and ensure ALPS objectives & staff objectives are aligned	Staff are appropriately recruited, trained & offered staff development to fulfil ALPS' objectives	ALPS Fellows or equivalent appointed. New staff in PSIGs/Core Team are given induction	January 2007	**PSIG leads/ACT**
	A2.4 Reward staff for enhancing work of ALPS	a. Reward mechanism agreed within each partner HEI	a1. ALPS objectives integrated in staff development & review schemes a2. Possible activities include rewarding staff through secondment/ fellowship/ sabbaticals/ promotions/ special payments/ honoraria/	a.summer 06 & onwards	**PSIG Leads**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead
			awards/ Masters courses/conferences		**PSIG Leads**
		b. Funding secured from within partnership & outwith for use in mini project scheme e.g. NHSY&H	b1. Identify sources of funding b2. bid for funding b3. launch small grant scheme & make awards	b1 & 2. December 2006 onwards b3. January 2007 onwards	**D/PM** **D/PM/PSIG leads**
		c. ALPS offers opportunities to external staff/providing collaborative environment. Practice partners involved in publications & presentations (providing critical evidence for their KSF and career development)	c1. Updating of database of key staff in each profession/HEI who participate/have interest in ALPS c2. Develop mechanism to include external practitioners, e.g. honorary appts/small project money for practice staff c3. Support partner HEIs to maintain reward mechanism & thereby address sustainability issues	c1. December 2006 onwards c2. December 2006 onwards c3. December 2006 onwards	**ACT** **PSIGs** **PSIGs**
	2.5 Enable health & social care students to acquire higher levels of knowledge & skills about adult learning theory & practice based assessment	Students involved in self- & peer assessment Student feedback is positive on use of tools/methods	Students to use ALPS tools methods in formative self- & peer assessment Students engaged with mobile technologies in pilots & roll out	September 2007 onwards May 2007 onwards	**PSIGs** **ITG/PSIGs**
	A2.6 Work with PSRBs keeping them informed of proposed changes to approved courses	Changes to course documentation approved by HEI & PSRBs	a. Maintain contact with PSRBs and ensure kept updated with ALPS work b. DIG/Advisory Board manage lines of	a. September 2007 (formal meeting) & ongoing (informal by partners) b. February 2007 onwards (DIG) &	**a. JMG/DIG** **PSIG leads** **b. DIG/AB**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead
			communication	ongoing (Advisory Board)	
		Re/Validation successful	c. Continue to identify & respond to any PSRB concerns	c. December 2006 onwards	**c. JMG**
			d. Ongoing programme of revalidation exercises in partner HEIs	d. September 2007 onwards	**PSIGs**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead
A3. Aim: to enhance the role of service-users and carers in assessment and learning in practice settings **Outcome:** service users & carers are part of the process of practice-based competence assessment	A3.1 Develop, extend & roll out programmes to include service users & carers	a. Report of existing service user & patient carer involvement in partner activities	a. Map existing involvement of service users & carers in partners: • student recruitment • curriculum development • teaching & assessment (on campus/in practice placements) • ALPS management & partner involvement	a. December 2006	**a. LDO**
		b. Service User & Carer Working Group (SUCWG) established	b. JMG agree to establish group, membership, terms of reference & meeting schedule agreed	b. January 2007	**b. LDO**
		c. Service users & carers are involved in the ALPS assessment process & their feedback is incorporated	c. SUCWG direct a programme of work to be undertaken by PSIGS & ACT	c. January 2007 onwards	**c. SUCWG/PSIGs**
		d. Register of service users & carers available	d. Register compiled & maintained by SUCWG as a resource for partners to work with service users & carers	d. March 2007 onwards	**d. SUCWG**
		a. Dissemination Plan updated. Service users & carers are: • aware of ALPS programme • represented on PSIGs, & partner-related groups • contributing to ALPS activities, eg. Management Group meetings, newsletters,	a. Promote & publicise ALPS programme of work across own & external networks (community & voluntary groups), including NHSY&H/Patient & Public Involvement by: • presentations/speakers • newsletter articles • leaflet • service user & carer representation on: - Working Groups	a. May 2007 & ongoing	**a. DIG/PSIGs**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead
		Common Competency & IT work, etc	- PSIGs - partner/school groups		
		b. Partners are members of service users & carers networks contributing to meetings & activities	b. Partner representation on service user & carer network groups	b. December 2006 & ongoing	**b. PSIGs**
		c. JMG & partners can identify extent of service user & carer involvement in ALPS	c. Progress report to JMG	c. May 2007	**c. DIG/SUCWG**
		a. Service users & carers: • learn to be teachers /assessors • receive induction & ongoing support whilst contributing to partner activities • act as facilitators to student & staff learning, eg. simulated patients • contribute to assessment of student & staff learning, eg. provide verified witness statements • are contributing members of PSIGs & ALPS Working Groups	a. Develop new & extend existing: • preparatory course/ module/materials • induction with support systems • assessment & teaching involvement • role in PSIG/ALPS management • ALPS contribution to service users & carers networks to support ALPS programme of work	*SUCWG will direct this programme of work (see 3.1.a activities) & advise on timetable*	**a. SUCWG**
		b. Partners: • contribute to appropriate service user & carers' networks	b. Partners: • identify appropriate networks • contribute to networks	b. December 2006 & ongoing	**b. PSIGs**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead
		• identify, share & adopt effective practice	• harvest effective practice agree & adopt effective practice		

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Target date	Lead
A4. Aim: to develop effective project management, evaluation and partnership working **Outcome:** ALPS programme of work is implemented & collaborative working is successful	A4.1 Maintain appropriate governance arrangements	a. HEI/Faculties provide management support eg. HR/finance & champions b. ALPS Management Groups directing programme of work & have terms of reference, membership & meeting schedules	a. ALPS partners maintain commitment from their HEI/Faculties b. ALPS Management Groups functioning & accountable	a. December 2006 & ongoing b. December 2006 & ongoing	**a. PSIGs** **b. PM/JMG**
	A4.2 Revise & implement Strategic and Operational Plans	a. Updated Strategic & Operational Plans available b. PSIGs update implementation plans	a. ALPS Strategic & Operational Plans revised & agreed b. PSIGs discuss & revise implementation plans	a. December 2006 b. January 2007	**a. PM/JMG** **b. PSIGs**
	A4.3 Maintain appropriate procedures and processes for managing workplan and finance	ALPS annual report available including partner reports	a. Reporting requirements obtained from HEFCE & MEG develops reporting template. PSIG leads & PM implement reporting requirements to meet HEFCE & own HEI requirements	a. March 2007 b. April 2007	**a. MEG** **b. PSIGs/PM**
	A4.4 Work in co-operation with stakeholders, partners and projects to ensure a coherent, common approach	ALPS: • builds on existing knowledge • avoids duplicating work with external projects • maximises & disseminates ALPS outputs	ALPS: • Management Group membership to include stake-holders & partners • responds to stakeholder input • networks with external groups & projects & uses their outputs • disseminates ALPS	December 2006 & ongoing	**JMG**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Target date	Lead
			outputs		
	A4.5 Maintain effective Partner Site Implementation Groups with appropriate membership	PSIGs maintain & review terms of reference/ membership/meeting schedule agreed	a. PSIGs terms of reference reviewed b. Membership reviewed c. Meeting schedule updated	December 2006 & ongoing	**PSIGs**
	A4.6 Maintain & revise a PSIG work programme appropriate & relevant to ALPS	a. PSIG Operational Plan updated b. PSIGs delivering ALPS outcomes	a. ALPS Operational Plan available b. PSIGs revise & implement own Operational Plan	a. January 2007 b. February 2007 & onwards	**a. PM/JMG** **b. PSIGs**
	A4.7 Monitor, review and revise work programme and objectives as necessary	a. Reporting framework agreed b. PSIG reports available to MEG c. JMG review & revise Operational Plan d. Revised Strategic & Operational Plans agreed	a. MEG develop reporting framework meeting HEFCE requirements b. PSIGs produce reports as required c. MEG review & evaluate, reporting to JMG. JMG review programme of work & revise Strategic & Operational Plans, reporting as required to Advisory Board d. JMG report significant changes to Advisory Board & RAG	a. March 2007 b. May 2007 & every 6 months c. June 2007 & every 6 months d. July 2007 & every 6 months	**a. MEG** **b. PSIGs** **c. MEG** **d. AB**
	A4.8 Produce and implement an evaluation of ALPS programme of work	a. Monitoring and Evaluation Group continues to function b. Evaluation strategy implemented c. Evaluative data/reports produced for	a. MEG maintains & reviews terms of reference/ membership/meeting schedule agreed b. Evaluation strategy written & agreed by JMG c. All MEG & PSIG members engage in	a. January 2007 & ongoing b. February 2007 c. February 2007 & ongoing	**a. MEG** **b. MEG/JMG** **c. MEG/PSIGs**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Target date	Lead
		JMG/HEFCE/partner HEIs	evaluative work		
		d. Interim evaluation report submitted to HEFCE	d. MEG & PSIGs produce qualitative & quantitative data	d. April 2007	**d. MEG/ PSIGS**
		e. Formative & summative reports submitted to Advisory Board	e1. M&E Group oversee, co-ordinate and synchronise PSIG-led evaluation	e1. January 2007 & ongoing	**e. MEG**
			e2. Formative evaluation every 6 months, summative evaluation at the end of each phase	e2. July 2007, January 2008 & July 2008	
	A4.9 Contribute to the body of knowledge on working collaboratively across HEIs, subject areas & service providers	a. Research strategy & workplan published	a. Research strategy & workplan includes areas of collaborative working	a. December 2006	**a. RG**
		b. Research programme into collaborative working is undertaken	b. RG initiate & lead research into collaborative working	b. *RG to advise research timetable*	**b. RG**
		c. Data collected on collaborative working	c. PSIGs, ACT & Management Groups develop activities to capture experiences & report	c. *see above*	**c. PSIGs/ACT/ Management Groups**
			d. ALPS staff contribute to HE, professional & health & social care fora/agencies of policy development	d. *see above*	**d. All**
			e. ALPS publishes reports/papers disseminating knowledge on collaborative working	e. *see above*	**e. RG/DIG**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Target date	Lead
A5. Aim: to research and disseminate assessment practice **Outcome:** a body of scholarly knowledge of assessing professional competence is created & contributes to changes in professional cultures	A5.1 Implement pedagogic research on ALPS programme of work Research & evidence base developed to inform & support positive changes in assessment practice	a. Programme of research initiated & led by RG b. Research report received by JMG c. ALPS research culture developed, junior researchers mentored d. Dissemination of ALPS research across partner HEIs, professional groups & HE	a. Research workplan implemented by working groups: - baselines & outcomes research group - e-valuation (IT) group b. RG writes progress report for JMG c1. PSIGs to ensure ALPS, institutional & school research strategies align c2. Partners research is co-ordinated to avoid duplication of effort and maximise ALPS outputs c3. Programme of pedagogic support/training (workshops, seminars, briefings on how to get started) agreed and implemented c4. ALPS Fellows contribute to pedagogic research d. Research outputs submitted: • papers • conference presentations • posters • workshops	a. December 2006 onwards b. March 2007 c1. December 2006 onwards c2. December 2006 onwards c3. January 2007 onwards c4. December 2006 onwards d. December 2006 onwards	**a. RG** **b. RG Chair/RO** **c1. PSIG leads** **c2. RO/RG** **c3. RO** **c4. ALPS Fellows** **d. RG/PSIGs**

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead

Strategic aim & Outcome	2006-2008 target	Evidence of success	2006-2008 Activities to achieve Target	Milestone & Target date	Lead
A6. Aim: to respond to and influence national and international policy and culture in assessment **Outcome:** ALPS builds on existing & contributes to national & international scholarly knowledge	A6.1 Become a credible provider of advice on assessment of learning in practice settings influencing professional, statutory & regulatory bodies nationally Network, collaborate & share with national & international individuals & organisations	a. ALPS programme of work features in conference materials/publications/across networks	a. promote ALPS through subject/higher education/ health & social care fora: - conferences - meetings - publications - networks	a. December 2006 onwards	**a. D&IG**
		b. Number of responses submitted, considered & used	b. respond to PSRB/regional/ national/ international/subject/ professional consultations	b. December 2006 onwards	**b. AB/PSIGs**
		c. Number of invitations to respond to consultations received	c. ALPS' view is sought by external bodies	c. July 2007	**c. AB/PSIGs**
		d. ALPS staff are members of influential committees/agencies	d. existing & new opportunities are used to promote ALPS outputs	d. December 2006 onwards	**d. JMG/PSIGs**
		e. Number of research outputs submitted/accepted	e. Research & dissemination programmes undertaken	e. December 2006 onwards	**e. RG/DIG**
		f. Citations in professional & academic literature	f. research outputs produced & disseminated	f. December 2006 onwards	**f. RG/DIG**

Key

ALPS Management Groups:	GLOSSARY:
Advisory Board	
Core Team Dissemination & Impact Group	AB – Advisory Board
IT Group	ALPS – Assessment & Learning in Practice Settings
Joint Management Group	ACT – ALPS Core Team
Monitoring & Evaluation Group	CCMWG – Common Competency Mapping Working Group
Research Group	CETL – Centre for Excellence in Teaching & Learning
	D&IG – Dissemination & Impact Group
	HEI – Higher Education Institutions
University of Leeds – internal monitoring:	HR – Human Resources
Risk Assessment Group	ITG – Information Technology Group
	MTPM – Mobile Technologies Project Manager
	KSF – Knowledge & Skills Framework
	LDO – Learning Development Officer
	LT&A – Learning, Teaching & Assessment
	MEG – Monitoring & Evaluation Group
	JMG – Joint Management Group
	NHSY&H – NHS Yorkshire & the Humber
	PSIG – Partner Site Implementation Group
	PSRB – Professional, Statutory & Regulatory Bodies
	RAG- Risk Assessment Group
	RG – Research Group
	RO- Research Officer
	SUCWG – Service Users and Carers Working Group
	VAE – Virtual Assessment Environment