Institution: Robert Gordon University (RGU)

Unit of Assessment: UoA36

a. Context
The focus at Robert Gordon University (RGU) is on translational research, developing a base of staff and students who undertake highly relevant leading-edge research that advances knowledge and provides tangible benefits to the wider economy and society. Aligned with this vision, the work of the Information & Communication Group (ICG) within RGU's multidisciplinary Research Institute for Management, Governance & Society (IMaGeS) maintains a focus on high quality translational research on the use and impact of information, with emphasis on information user perspectives and contexts, both contemporary and historic (see **REF5**): **User Behaviours and Skills** (**Baxter, Burnett, Martzoukou, Marcella, Williams); Managing Information Assets (Fulford, Muir, Tait, Oppenheim**); and **Information Environments** (**Davies, Laing, Pedersen, Reid**). The main areas of impact are economic (e.g. energy industry), social (e.g. social enterprises, social media), professional (e.g. libraries, professional bodies), policy making (e.g. energy, education).

b. Approach to impact
A stated goal in our RAE2008 submission was **to impact on social, cultural and economic development with strong research dissemination and knowledge exchange underpinning high-quality, professionally relevant courses.** The Group's approach has been to i) actively engage users at different stages in the research process; ii) make research outcomes accessible through user-targeted dissemination. This approach complements our development of high quality practitioner researchers through the UK's first professional doctorate in information science (DInfSci) designed specifically for information professionals with at least three year's management experience, with research topics of strategic importance to their organisations (see **REF5**).

i)   Active engagement
Strategic planning: The work of the Group has been influenced by high level user involvement in a University-wide foresighting exercise in 2011, in which a prestigious international panel including leading figures from industry, public sector and third sector came together to consider the key social challenges facing society in the next 20 years and the research which will be required to address these challenges. As a result the university has identified three cross-disciplinary areas to which the Group is already contributing: remote healthcare (**Davies'** work contributes to health research in examining information usage by health professionals (**REF2, Davies** 1,2,3,4)); oil and gas (ICG research contributes to the understanding and use of information and knowledge management in the oil and gas industry (e.g. **3b case study; REF2, Marcella** 4**, Burnett** 1,2,4**, Williams** 3,4)), and 'energy societies', the complex non-technological energy challenges faced by society (e.g. **Williams & Burnett's** current knowledge management and innovation research within the collaborative ENERMAN project looking at energy change in the meat and dairy sectors). The energy societies research has resulted in collaboration with the Universities of Aberdeen and Dundee to form the new Offshore Renewables Institute, an industry focused development with ERDF funding, in which **Marcella** is a member of the governing board.

Research partnerships and collaborations: Success in fostering partnerships and collaborations with user organisations, particularly industry, is demonstrated by increased volumes of industry funding (see **REF 5** and **3a case study**). Partnerships include a textile company as core partner in AHRC-funded STA(r) research into the development and use of a smart, living heritage textile archive (**Williams & Burnett,** www.rgu.ac.uk/star1; **REF2, Williams** 2), and three information management knowledge transfer projects (KTPs) focusing on the strategic needs of energy companies (**Muir**) and a social enterprise company (**Fulford**). The early impact of the IM Energy Forum, a KTP with Amor Pragma developing IM practice in industry, led to its establishment as a subscription-based forum for IM professionals in the energy sector, and to the foundation of a Document Control short training course in 2012. Significant increase in industry commissions and funding (see **REF5** & **3b case study**) is further evidence of economic impact of ICG research.

Targeted outcome activities: Specific targeted activities are designed to actively engage user groups with research findings. For example, a small working group of heads of schools library

services was set up to work with **Williams** to map the outcomes of recent Scottish Library and Information Council (SLIC) commissioned research on impact of school libraries on learning against the Curriculum for Excellence in Scottish schools and to design a graphic illustration of the findings to enhance impact amongst practitioners, senior managers and policy-makers. Research for SLIC and led by **Reid**, has reviewed and updated the Public Libraries Quality Improvement Matrix (PLQIM) to ensure that it "remains robust and relevant in the future" (SLIC ALMA report, July 2013). The implications are significant, particularly at a time of local-authority cut-backs, and **Reid** has delivered workshops (Sept and Oct 2013) to engage heads of public library services across Scotland in the proposed changes. **REF3b** case studies detail other examples of targeted activities such as the launch of **Marcella's** AVEVA report on health and safety information in the energy sector, leading to widespread coverage in press and industry.

Expert Engagement: Members of the group provide expert input to inform government policy. **Reid** is working with SLIC to develop a ministerial briefing for the Cabinet Secretary in preparation for a Scottish parliamentary debate on libraries in November 2013, when the review of PLQIM is expected to be raised in parliament. SLIC have already received requests from MSPs for further information of the outcomes from Reid's work. **Marcella**'s research has influenced policy making in relation to economic growth through her invited membership of a Dept for Business, Innovation and Skills (BIS) task force advising Government on better engagement of business schools with industry, and an Independent Expert Commission for the Scottish Government to consider options for implementation of a Scottish Government paper relating to oil and gas (see **3b case study**).

ii)   Dissemination to users

The Group has had a long-standing commitment to the dissemination of research beyond the academic community, achieved through a variety of channels suited to topic and user group:

Media: In addition to presenting research in practitioner journals (see **REF3b case studies**) ICG uses support from RGU's Communications Office to share news of research activity through RGU's monthly web-based newsletter 'Nexus' and through Twitter. Traditional media channels have been well used for research dissemination, with ICG staff being interviewed and quoted in newspapers including The Telegraph, The Times, Daily Mail, The Scotsman, as well as TV and radio (BBC Radio, STV). **Pedersen**'s research on the use of social media and online bullying, has led to interviews with women's magazines Grazia and She, 2009-2010, which aimed to increase understanding of the potential and risks of blogging, and an invitation to act as advisor on a TV teen soap for a not-for-profit company specialising in educational and ethical issues. She has successfully used social media to enhance research reach including Huffington Post and online communities such as FeverBee (www.feverbee.com) and Mumsnet (www.mumsnet.com). The interest generated has led to invitations to explore possible future research with Mumsnet.

Research Institute channels: The multidisciplinary environment of IMaGeS helps ICG reach a wide range of audiences. For example ICG research was showcased at the public launch of IMaGeS in 2011, which included a keynote presentation by political economist Will Hutton, an invited wide-ranging audience from industry, local government, third sector and professional bodies, including information services, and a week-long public exhibition of research. ICG research has been included in IMaGeS themed brochures such as the Information Management Research brochure (www.rgu.ac.uk/iimr-brochure) and Energy Societies Research video and brochure (www.rgu.ac.uk/esr-brochure), available publically online, and distributed at public and industry events. Selected IMaGeS seminars (e.g. Oppenheim, 2009, 2013) are open to practitioner audiences, and ICG's biennial international i[3] conference attracts practitioner researchers. Our Making Connections events series (see **REF3b case study**), was specifically initiated to bring together practitioners and researchers in information literacies. As well as ICG speakers, international presenters have included Kuhlthau 2007, Lloyd 2008 & 2013, Wilkinson, 2012.

External events: Research is regularly presented at external events targeted at specific user communities. In addition to case study examples (**REF3b**) these have included presentations to the textile industry (**Williams & Burnett**, The Scottish Borders Design and Technology Showcase, Galashiels, 2012), the meat and dairy industry (**Burnett**, The Enerman Technology Showcase,

Perthshire, 2013), the United Nations (**Burnett**, UN Geneva, 2009), and an invited presentation at The Henley Forum for Organisational Learning and Knowledge Strategies (**Burnett**, 2013). Energy related ICG research has been presented (**Williams, Burnett, Marcella**) at major industry exhibitions including All Energy, 2012 and 2013, and Offshore Europe, 2013, the latter attended by more than 60,000 delegates, leading to a wide range of follow-up activities and contacts. **Tait's** presentation of her research on social media and political participation **(REF2, Tait** 1) in the Café Connect Digital Economy series, led to an invitation to present at Dundee Science Festival (2011), where many of her audience had never previously been attracted to such a "Cafe Science" event.

c. Strategy and plans

The Group will continue the approach of combining active engagement of users in the research process with user-focused dissemination of research findings. The strategy going forward is to strengthen and formalise this approach by i) adopting an impact framework; and ii) embedding impact through staff and doctoral development. Together with development of publishing and open access strategies with input by **Oppenheim** (see **REF5**), this strategy should enhance the impact of ICG research as a whole while particularly benefitting early career researchers.

i)   Impact Framework: The ICG impact strategy builds on our existing impact work to date, and uses an ESRC model as a strategic framework to clearly articulate research impact and provide a basis for on-going tracking and evaluating of impact going forward:
- *Setting objectives:* To establish objectives explicitly relating to impact, including areas of impact (e.g. social, cultural, economic), as well as more specific form and type.
- *Developing messages:* To identify and produce key messages for non-academic audiences.
- *Targeting audiences:* To identify and prioritise potential research audiences and actively maintain the currency of audience contact details.
- *Choosing channels:* To identify appropriate and relevant communication channels for the dissemination of research findings to non-academic audiences.
- *Measuring success:* To identify and evaluate the impact of research through internal review.

ii)   Staff and research student development: The embedding of impact approaches and use of the impact framework is continuing as part of annual research objectives planning in the Employee Performance Review (EPR) programme described in **REF5**. IMaGeS theme leaders (**Burnett** for ICG members) meet with individual researchers twice each year to review performance and set objectives for the period ahead, and will in future require the identification of research impact plans. A training programme on research impact for members of IMaGeS, (including the ICG group) is in development to assist in this process. The University-wide staff development programme on research proposal writing, "From Angels Nest to Dragons Den", has been revised to include a component on planning for impact which will run for the first time in 2013-14. Doctoral students have already been included in impact training. As part of the ESRC Scottish Graduate School Doctoral Training Centre, ICG staff delivered a workshop ('Making an impact', March 2013) for doctoral students across the Information Science Pathway institutions, including impact planning, a case study, and a session with a media consultant to 'roleplay' a variety of media engagements. In addition, all RGU doctoral students are given an introduction to research impact as part of the compulsory PGCert Research Methods, and a module on research impact, originally designed for the university's Doctor of Professional Practice programme, is being opened up to all IMaGeS research students, including those in Information and Communication.

d. Relationship to case studies

Both case studies (**REF3b**) demonstrate the use of a range of activities and targeted dissemination to reach out and engage national and international user communities, beyond academia and also beyond the information discipline. The case study of research impact on information management in industry includes examples of the multiplier effect gained through targeted activities and dissemination leading to uptake and benefits in the energy sector, which in turn resulted in significant invitations to provide expert contributions to government. The case study of the impact on information literacy in schools demonstrates successful targeting of multiple user communities - librarianship and teaching professions, individual practitioners, professional bodies, government departments - through tailored and targeted activities and dissemination. Both cases highlight the value of the ICG's multi-faceted and pro-active user engagement approach.