BACKGROUND

The current IAH Council agreed at its first meeting in 2008 on the need for a comprehensive review of the Association's activities. This would assess what continuing and new activities IAH should be undertaking in the coming years and how it should be doing them. Although reviews have been undertaken before by IAH, they have not been followed up to lead to major developments in the activities of the Association.

Thus a new and more rigorous strategic review process looking forward to 2020 led by Secretary General Shammy Puri began by a consultation with IAH Council at its 2009 meeting in Hyderabad, and subsequently with National Chapters and broadly with the membership through questionnaires. By early 2010 the process had become known as IAH's "Forward Look", with the challenging objective of improving the operations of IAH to better serve its membership and to support globally the sustainable management of groundwater resources.

During July 2010 a review, discussion and strategy meeting was held at the University of Reading, UK. The 24 attendees were drawn from all areas of the Association and from all round the world – representing IAH Council, Commissions, Chapters and IAH's general membership. The highly productive meeting gave shape and scope to a range of activities that IAH should strengthen or undertake in the future, many of which have their origins in earlier suggestions made by the IAH membership.

The meeting was reported briefly to members in the IAH Summer 2010 newsletter. Following this a draft report on the Forward Look process was presented to Council in Krakow in September 2010 and finalised early in 2011. The full report details the discussions, suggested themes and proposals made and is available on the IAH website or by request by emailing **info@iah.org**. The purpose of this shorter document is to summarise the IAH activities and developments proposed, together with an indication of the timeframes involved.

IAH'S FUTURE -**FIVE KEY ELEMENTS**

Many ideas were raised in the Forward Look process and these have been collated into core groups of activity for IAH. By the time of the meeting in Reading five key elements were identified. Although they are by no means mutually exclusive, they provided a convenient framework for the discussions at the meeting.

the science of hydrogeology

Developing

Education and professional development

Informing and influencing global policies

Enhancing alliances and partnerships

Internal of IAH

INTERNAL DEVELOPMENT OF IAH

MEMBERSHIP AND BENEFITS

As an international association for groundwater specialists IAH should of course be primarily focussed on its membership. Those involved in the Forward Look process commented that IAH maintains the feel of an international family. This is greatly appreciated by members and should not be lost. For IAH to grow in strength, authority and influence, and to increase its overall membership we need to enhance the benefits provided to members to retain existing members and recruit new ones. Present membership has fluctuated just below 4000 in recent years, and the Forward Look has an ambitious target of reaching 5000 by 2020. Increased income from membership fees will provide greater capacity to undertake activities which the Forward Look identified under the five key elements. Placing major growth in membership as a specific target in IAH's vision statement is the easy part: achieving it will require a well defined growth strategy and major effort from all components of the Association.

To support such developments, improvement in IAH's membership database system, the data held and its use is required. New or improved secure software systems should be accessible by the general membership, the National Committees and other internal stakeholders. Several of the ideas put forward are already being implemented and others are planned to take effect soon.

COMMUNICATION

IAH's communication strategy should be reviewed, exploring ways in which lines of contact within the Association could be improved and developed to reflect changes in the way society communicates. It was agreed that IAH must improve links between its component areas and to this end work with the National Chapters has already begun. Social networking was discussed in Reading – and already a thriving LinkedIn network has been established and had over 400 members by the end of its first year. IAH needs to review the issue of language in its communications, perhaps producing key information in a variety of translations.

IMPROVED WEB SERVICES

Weaknesses in the current IAH website were widely commented on and already acknowledged, and some improvements have been made. A strong website using up to date technology and protocols in fact underpins many of the Forward Look activities. Work has been initiated by a simple webbased member survey to collect views and ideas. Proposals will be made to Council for significant investment in the structure, operation and content of the IAH website, but still within the relatively modest resources of a small

IAH MEETINGS AND CONGRESSES

Another key component of internal development and member benefits relates to improving the professionalism of IAH meetings and congresses. Some existing weaknesses and the actions required to address them have already been identified and improvements are already being introduced. An IAH Executive member will be responsible for liaising with and assisting each local organising committee and efforts in this respect are already underway.

However much is yet to be done. A small team within IAH Council is reviewing our congress operations and will advise on the way future IAH congresses should be conducted. Major changes could involve the way congresses are financed and organised and the financial relationship between the congress and IAH centrally. Changes could involve significant new costs, especially if the possibility that consistent congress management software systems be used for all IAH congresses is pursued. As for all aspects of the Forward Look, members will be consulted before major changes are implemented.

IMPROVED PUBLICATIONS STRATEGY

IAH will embrace suggestions made with regard to education and development materials, and the continuing success of the Association's Hydrogeology Journal and book series. The Executive may choose to set up that they play both as member benefits and as a component of the

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EDUCATION AND PROFESSIONAL DEVELOPMENT

ENHANCING WEBSITE CONTENT

Developing IAH's website was strongly agreed to be pivotal to its future success, with the ultimate goal being to make IAH's site the preferred gateway for groundwater professionals. To this end, IAH will develop a substantial education section on the website which will provide much more freely available material

ESTABLISHMENT OF THEMATIC FORUMS

Active thematic forums could provide a new focus for meeting some of IAH's educational objectives and draw more groundwater professionals to our work. This activity is closely linked to the reform of IAH's Commissions and Working Groups. IAH should identify key topics for potential forums and call upon its members and the wider groundwater community to participate.

DEVELOPMENT OF SHORT COURSES

Members have emphasised the professional development role of the Association and preparation of short courses could become a major activity. Depending on the complexity and scope of the material, this could require substantial costs and additional human resources to develop, disseminate and regularly update a portfolio of short courses. This may be an activity where suitable partnerships are essential. The proposal is regarded as worthwhile, and should be given further consideration before a decision to proceed is made. Even if IAH decides not to set up such courses, the education section on the website will be used to advertise or link to existing educational resources, relevant courses and training opportunities.

PRODUCTION OF VIDEOS, DVDS AND OTHER MATERIALS FOR EDUCATIONAL PUBLICITY

Apart from the Time Capsule project, IAH has little experience of such activities. Further work is required to evaluate the need and market for such material and the costs and viability of such an endeavour need to be established.

INFORMING AND INFLUENCING **GLOBAL POLICY**

FACTS AND FIGURES ON GROUNDWATER

Much of the knowledge of the major aquifer systems of the world is based on "recycled" old information and there is an urgent need for up to date and reliable information. The wide IAH network of members and national chapters, together with our existing scientific partners could provide a ready means of collecting the relevant data. A comprehensive and authoritative IAH document of this type would bring considerable benefit to the scientific standing of the Association.

PARTICIPATION IN INTERNATIONAL EVENTS AND ACTIVITIES

While the Association is already a participant in major international water events such as the World Water Forum and Stockholm Water Week, more could be done to raise our profile. IAH should also engage more widely with non-water events and activities where the importance of groundwater needs to be emphasised, and develop greater links to organisations, companies and personalities who facilitate this. Such participation would be enhanced by bringing in all components of IAH. Often guick decisions have to be made to enable participation and a better system of internal communication and budget

SUPPORT FOR UN GROUNDWATER ACTIVITIES

IAH's existing support to and engagement with the UN system should be strengthened. This includes support for UN Declarations and Laws where groundwater knowledge and understanding is needed. IAH should also consider developing a response mechanism for providing technical and scientific support in cases of risk and natural disaster, such as earthquakes, tsunamis, drought and floods.

PROVIDE SUPPORT FOR NATIONAL POLICIES

Through its national chapters, IAH should be able to provide greater scientific and technical support to the development and strengthening of national policies. IAH should also be able to provide further external international experience and knowledge to support national chapters if appropriate, drawn from its own wider membership.



FROM THE SECRETARY GENERAL, SHAMMY PURI

Any Forward Look must balance crystal ball gazing and sound judgement. In the case of the future of an Association such as ours, it also requires an element of risk and ambition – twenty years from now a new generation of hydrogeologists could be working with totally new technologies and working conditions. How to properly foresee this and to put in place now activities that will serve the future? Difficult but not impossible. This Forward Look was conceived in 2010

with strong resolve to serve IAH and the international groundwater community of the 2020s. In putting into place this Forward Look process, I am most grateful to all of those who have so greatly contributed to it and have pleasure in commending it to present and future members of the Association.

IAH'S NEW MISSION STATEMENT AND VISION

No strategic review would be complete without the Association examining its mission and aims and the following statements have been adopted:

IAH aims to further the understanding, wise use and protection of groundwater resources throughout the world.

and:

IAH will be the leading international society for the science and practice of hydrogeology and will be a globally recognized information source and facilitator for the transfer of groundwater knowledge. By 2020, we will serve over 5,000 members. We will raise awareness of groundwater issues and work with national and international agencies to promote the use of groundwater to ensure ready access to safe drinking water. IAH will also promote the protection of aquifers against pollution, the improvement of aquifer storage and the management of groundwater resources to assure the sustainability of groundwater-dependent ecosystems.

As members, partners or friends of IAH it is greatly hoped that you will come to embrace these values as we take our Association forward into the future.

NEXT STEPS FOR IAH – HOW YOU CAN HELP

The success of IAH is largely dependent on the goodwill and professionalism of its membership and associates. Even the smallest amount of your time could make a big difference – if you are interested in contributing towards any particular aspect of development of the Association outlined in this report please get in touch. To find out more you can either contact your national chapter committee or IAH's Secretariat by emailing **info@iah.org**

FOR FURTHER INFORMATION

Web <u>www.iah.org</u> Email <u>info@iah.org</u> Tel +44 0870 762 4462 Fax +44 0870 762 8462 PO Box 4130, Goring, Reading, RG8 6BJ UNITED KINGDOM IAH is a charitable company registered in the UK. Reg no. 3956233 Charity Reg no.1083019

ENHANCEMENT OF ALLIANCES AND PARTNERSHIPS

IMPROVING EXISTING PARTNERSHIPS

In much of the Association's existing work, and in the new activities proposed in the Forward Look, alliances and partnerships provide mutual benefits and allow pooling of limited resources to best effect. To enhance this IAH will explore ways to increase its engagement with current partners, including international agencies like the Global Water Partnership and with sister professional associations in earth sciences (IUGS and GSA) and the water sector such has NGWA and IAHS. Joint conferences, jointly convened sessions or publications could be useful ways of achieving this.

DEVELOPING NEW PARTNERSHIPS

IAH should seek to develop new alliances with relevant national, regional and global agencies and organisations. A strategy needs to be developed in which key representatives of IAH can be identified to carry this process forward and, where appropriate, could be given some limited support to do so. Activities could include the provision by IAH of training and education in groundwater to related or other non specialist organisations. The development of new alliances by IAH should include establishing working relationships with relevant media and other information outlets, perhaps by employing additional expertise or by developing existing skills through media training and by providing background groundwater science to important news stories of the day.

DEVELOPING THE SCIENCE OF Hydrogeology

REFORM OF THE IAH COMMISSIONS

The science base of the Association has long been its Commissions. These should not be seen as static or rigid but instead should respond to new issues and challenges, and a thorough evaluation of the working of the IAH Commissions has been long overdue. As part of the overall Forward Look process, the operation of the Commissions has been reviewed and a new structure set up which embraces commissions and networks, working groups and panels – each with slightly different objectives, activities, outputs, obligations and ways of working. Proposals for renewal of existing commissions and applications for new ones were invited in the first half of 2011 and, as a result of this process, from July 2011 three of the existing commissions will continue as commissions and three as networks, and there will be one new commission and three new networks. Other proposals are expected and are indeed welcomed and this is an opportunity for more IAH members to become involved in the scientific endeavours of the Association.

PROMOTING AND ENCOURAGING GROUNDWATER SCIENCE

While IAH does not itself conduct research it should nevertheless be in a position to provide insights into the directions that new research needs to take, identify gaps and emerging issues and provide overall perspective and context to those engaged in research. The home within IAH of this key theme of science has traditionally been our commissions, and this will continue to be the case for the work of the renewed and newly-established new commissions and networks.

Following the discussions in Reading, additional science activities that IAH might like to take up include:

- Facilitate cross-disciplinary dialogue with other professions;
- Enhanced appreciation of the importance of the unsaturated zone, including aspects of surface water/groundwater interactions and recharge;
- Promote research on the core aspects of hydrogeology, including aquifer properties and their heterogeneity and hydrogeochemistry;
- Assess the use of emerging technologies in improved groundwater exploration, protection and management;
- Promote publication in special publications and journals and increase the scientific quality and profile of the IAH books. Consider providing mentoring and support to younger IAH members, including encouraging them and providing opportunities to publish their research;
- Promote education through schools, colleges and universities.

These are broad and varied topics, and consideration needs to be give to the best way to take them forward. The Reading meeting recommended that an expert panel be formed under the new commission arrangements, or at least under the remit of the IAH Vice President for Science Coordination. This panel should be charged with enhancing the development of groundwater science in the name of IAH. Upstream groundwater discharges into the gorges of Karijini National Park

WHERE DO WE GO FROM HERE? PLAN OF ACTION FOR 2010-2020

Following the successful outcome of the Forward Look meeting IAH Council requested that Shammy Puri and the Executive Committee formulate an outline plan of action. It was acknowledged that to implement the full range of developments would require considerable human and financial resources. IAH therefore has to prioritise the tasks. Progress will be regularly reviewed over the next 10 years and key developments communicated to the membership and beyond. The tables below summarise the activities, indicate proposed priorities and suggest the likely timescales involved.

INTERNAL DEVELOPMENT OF IAH Membership and benefits, enhanced communication:	Status – mid 2011	Priority	Term of Development	Further investigation required
Upgrade membership database and provide secure access to IAH worldwide as required	Started	High	Short-medium	No
Develop a stronger IAH communication strategy, working with national chapters and commissions, to include producing key information in different languages	Started	High	Ongoing	No
Develop IAH's website to better facilitate communication	Under review	High	Ongoing	Yes
Improve networking amongst the membership - via the internet, meetings	Started	High	Short-medium	No
Increase IAH's membership to 5000 and double the number of national chapters	Started	Medium	Long	No
IAH Meetings and congresses:				
Named point-of-contact in IAH Executive to assist local organising committees	Done	High	Done	No
Review IAH's strategy and organisation of its congresses and meetings, considering financing, software and management options	Underway	High	Medium	Yes
Phase in developments, monitoring their implementation and impact	-	Medium	Long	No
Improve IAH's publication strategy:				
Formulate a strategy that embraces suggestions made at Reading	-	Medium	Medium-long	Yes
Work with publishers to ensure IAH publications continue to be a success, update design and layout, investigate new ideas	Underway	Medium	Medium-long	Yes
EDUCATION AND PROFESSIONAL DEVELOPMENT Improve website structure and content so that the IAH website is the preferred information gateway for groundwater specialists	Underway	High	Short-medium	Yes
Establishment of thematic forums	-	Medium	Medium-long	No
Development of short courses	-	Medium	Medium-long	Yes
Production of videos, DVDs and other materials for IAH education and publicity	-	Medium	Medium-long	Yes
INFORM AND INFLUENCE GLOBAL POLICY				
Preparation of authoritative IAH document on "Facts and Figures about Groundwater"	Underway	High	Ongoing	No
Increase IAH engagement at key events and with related organisations	Underway	Medium	Ongoing	No
Engage in and support major UN Declarations and laws	Underway	Medium	Ongoing	No
Provide technical support in critical emergency situations	-	High	Medium	No
Provide support for developing national policies via IAH's national chapters	-	Medium	Medium-long	No
ENHANCEMENT OF ALLIANCES AND PARTNERSHIPS				
Improve existing alliances & partnerships with global institutions & sister professional associations	Underway	High	Medium	No
Identify IAH representatives to help broker alliances and develop partnerships	-	Medium	Medium-long	Yes
Explore local and global agencies, sister associations and other groundwater-related organisations with a view to developing new alliances and partnerships	-	Medium	Medium-long	Yes
Form working relationships with media and information outlets, either by employing expertise or by developing existing skills through training	Underway	High	Medium-long	Yes
DEVELOPING THE SCIENCE OF HYDROGEOLOGY				
Reform of the IAH commissions, establishing new commissions and networks	Done	High	Ongoing	No
Form an expert panel to develop a strategy for promoting IAH's scientific activities and the science of hydrogeology in general	-	High	Medium-long	No
	-	High	Medium-long	No

