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Review and Way Forward of the
INTERNATIONAL ORGANIZATION FOR MEDICAL PHYSICS

2006-2012

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FOREWORD TO REVISED 2009 EDITION

To be inserted by Prof. Fridtjof Nüsslin, President 2009-2012

FOREWORD TO FIRST EDITION

This document reviews the current activities of the International Organization for Medical Physics (IOMP) and sets out both short and longer-term priorities and plans for the Organization. The Council of IOMP approved it at a meeting held in Seoul, Korea in August 2006. It is the intention that the document be kept under regular review and updated as required.

‘Review and Way Forward’ will be a valuable document within the Organization by serving as working guidelines to EXCOM, Committees and Council. As the document sets out clearly the activities and future direction of the IOMP, it will also be of value to a variety of organizations including potential sponsors, grant awarding bodies (e.g. charitable bodies and foundations), Corporate Members, as well as to those organizations with whom we have mutual interests such as IUPESM (International Union of Physical and Engineering Sciences in Medicine), IFMBE (International Federation of Medical and Biological Engineering), IAEA (International Atomic Energy Agency), WHO (World Health Organization) and IUPAP (International Union on Pure and Applied Physics).

A consultation document “Strategy Planning Document” was circulated to Council members in February 2006 for consultation. A number of useful ideas emerged from this consultation. Comments received were taken into account in preparing this document. Many of the detailed comments received as part of the consultation are not appropriate to be included in this document but are very valuable and will be further considered in the reviews of specific areas or when implementing agreed objectives, as appropriate.

This “Review and Way Forward” document consists of the following sections:

1. Past, Present and Membership
   This section is a brief overview of the Organization.
2. **Current Activities and Proposed Developments**
   This section is a review of current activities and outlines the way forward for each area. It also incorporates new proposals.

3. **External Relations**
   This section is a review of the Organization’s current relationships with other organizations and proposed developments.

4. **Administrative and Financial Affairs**
   This section is a review of the Organization’s administrative and financial affairs.

5. **Strategic Themes and Priorities**
   This section identifies key themes and objectives and identifies the main priorities.

6. **Specific Proposals with Assigned Priorities for 2006 – 2009**
   The planning budget in this section is for planning purposes only and the normal process for preparing and approval of the annual budget will be followed. Also Council has authorised EXCOM to adapt and modify the section in the light of the views and comments of the new committees (2006 - 2009) and their chairs.

   It should be noted that some of the terminology reflects changes being proposed to Council in the revision of the Statutes and Bylaws, in particular for 'Council' to replace 'Administrative Council' and 'Regional Organization' to replace 'Regional Chapter'.

   It is planned that Council should review this document at regular intervals and it will evolve as IOMP evolves.

Professor Barry Allen
President
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1. PAST, PRESENT AND MEMBERSHIP

1.1 Introduction
The International Organization for Medical Physics (IOMP) represents over 18,000 medical physicists worldwide and has 79 affiliated national member organizations. The mission of IOMP is to advance medical physics practice worldwide by disseminating scientific and technical information, fostering the educational and professional development of medical physics and promoting the highest quality medical services for patients.

Medical Physics is a branch of applied physics, pursued by medical physicists, which uses scientific principles, methods and techniques in practice and research for the prevention, diagnosis and treatment of human diseases with a specific goal of improving human health and well-being.

A medical physicist is a person, qualified with a University degree majoring in physics with specialized education and training in the concepts and techniques of applying physics in medicine and healthcare.

In some countries the term ‘medical physics’ is often used as synonymous with ‘clinical radiation physics’ whilst in others the interpretation is much broader, with considerable overlap with biomedical (or clinical) engineering, as illustrated in the diagram below:
Other terms in common use which are either synonymous with or denote particular aspects of medical physics are ‘clinical physics’, hospital physics’ and ‘bio-medical physics’. Health physics is a more general term used not only in the healthcare field, where it is practiced by medical physicists, but also in the nuclear industry, amongst others. ‘Bio-physics’ is used in both the medical and biological fields.

1.2 History
The International Organization for Medical Physics (IOMP) was formed in 1963 and has the following objectives:

- *To organize international cooperation in medical physics and to promote communication between the various branches of medical physics and allied subjects.*

- *To contribute to the advancement of medical physics in all its aspects.*

- *To advise on the formation of national organizations of medical physics in those countries which lack such organizations, and also the possible formation of national committees in those countries where there is more than one medical physics organization.*

For these purposes it has the power:
• To set up bodies for specific purposes which will further the objectives of the organization.

• To organize and/or sponsor international conferences, regional and other meetings or courses.

• To collaborate or affiliate with other scientific organizations.

• To develop any activity deemed helpful to the forwarding of its declared objectives.

In 1980 IOMP, together with the International Federation of Medical and Biological Engineering (IFMBE), formed the International Union of Physical and Engineering Sciences in Medicine (IUPESM) as an umbrella body. The IUPESM became a member of the International Council of Scientific Unions (ICSU) in 1999.

In 2005 IOMP formed a relationship with the International Union of Pure and Applied Physics (IUPAP), to strengthen collaboration of medical physicists with other physicists with similar interests. Within the IUPAP organization, IOMP is recognized as an Affiliated Commission and is referred to as the International Commission on Medical Physics (IComMP). Within IOMP, the International Commission on Medical Physics (IComMP) Committee facilitates collaboration of the medical physicists with the physicists who have the similar academic interests in research and education.

The following diagram illustrates IOMP relationships with these organizations:

![Diagram](image_url)

*Figure 1.1 External links of IOMP*
The following diagram illustrates IOMP internal organization:

![Diagram of IOMP internal organization](image)

**Figure 1.2. Internal organization of IOMP**

### 1.3 Membership

IOMP has three categories of membership:
1.3.1 National Bodies
There are currently 79 national bodies, of these about 12 are inactive. There are probably only a very few more countries where there may have sufficient numbers of medical physicists to make a national organization viable. However IOMP does provide special arrangements whereby individuals, or small groups of medical physicists, may become members of IOMP, if deemed necessary.

Way Forward: To continue to encourage national medical physics organizations to join IOMP if they are not members and to encourage and support the formation of new national organizations where none exist. Also to explore further ways of helping, in conjunction with any Regional Organization, individuals or small groups of medical physicists where no national Organization exists and those national organizations which are struggling or inactive.
1.3.2 Regional Organizations
There are currently four Regional Organizations (previously called Chapters) with two further ones, the Federation of African Medical Physics Organisations (FAMPO) and the Middle East Federation of Organizations for Medical Physics (MEFOMP) are in the final stages of formation. If these are formed the only area not covered by a regional organization will be North America.

Way forward: To support the new regional organizations in Africa and the Middle East. Also to work more closely with, and support the activities of, the Regional Organizations to ensure the work and activities of the IOMP and Regional Organizations are synergistic in advancing medical physics.

1.3.3 Corporate Members
There are currently only a small number Corporate Members but in the past the number has been greater. There are currently no structures within IOMP to enable or encourage Corporate Members to participate in the activities of IOMP and the current efforts to attract Corporate Members are not working.

Way Forward: The category of Corporate membership should be reviewed in relation to the role Corporate Members can play in the activities of IOMP, alternatives to membership dues (sponsorship etc.) and privileges. The aim should be to have at least 15 Corporate members by 2012.
2. CURRENT ACTIVITIES AND PROPOSED DEVELOPMENTS

2.1 World Congresses, International Conferences and Scientific Meetings

2.1.1 World Congresses (WCs)
World Congresses on Medical Physics and Biomedical Engineering (WCs) are organised by IUPESM and normally organized by an individual national Organization. They are held every three years. IOMP is represented on the programme committees of WCs and through the IUPESM Congress Coordination Committee.

Way Forward: To continue to fully support the World Congresses through IUPESM while enhancing IOMP presence at WCs by exploring new approaches, including themed courses (scientific and educational) and broadening the scope of the programme to a wider range of physics relevant to health and well-being.

2.1.2 IOMP International Conferences on Medical Physics (ICMP)
At the WC-2003 in Sydney, Australia, IOMP decided to have regionally based international conferences of medical physics every three years, approximately halfway between World Congresses. These are organised by a National Organization after an open selection procedure.

Way Forward: To support and develop the IOMP ICMPs, including having a named IOMP lecture.

2.1.3 Sponsored and Endorsed Meetings
The scientific, educational, and professional meetings on medical physics are often sponsored or endorsed by IOMP using established criterion. Sponsored meetings receive limited financial grants from IOMP but endorsed meetings receive no financial support. The main criterion for sponsoring meetings is the participation of members from the neighbouring countries/regions.

Way Forward: To continue the current arrangements but to increase both the number of sponsored meetings and the funding available to support these meetings. Also to examine the introduction of CPD (Continuing Professional Development) points (credits), possibly in conjunction with one or more national schemes.
2.1.4 **International Scientific Exchange Programmes**

At the WC-1991 in Kyoto, Japan, IOMP decided to collaborate with AAPM (American Association of Physicists in Medicine) on an annual basis in organizing International Scientific Exchange Programmes (ISEP) for developing countries. In addition to the formation of international libraries and the formation of medical physics associations in countries where one does not exist, the main focus of this programme is education and training of medical physicists. The one-week courses/workshops of the ISEP programmes were initially in radiation therapy physics but later they were extended to include a separate one-week course/workshop in nuclear medicine and diagnostic physics as well.

*Way Forward: To continue to fully support this programme and to explore, in close liaison with AAPM, means of increasing funding available for supporting these ISEPs.*

2.1.5 **IOMP Sessions at International Meetings**

IOMP arranges, sometimes in conjunction with other international bodies, specific sessions or seminars at various international meetings. These, at different times and meetings, cover scientific, professional, educational and training matters.

*Way Forward: To enhance IOMP presence at appropriate international meetings by arranging special sessions. These sessions should not only promote IOMP but deal with those issues where IOMP has a specific role, such as the involvement in drafting, disseminating and implementing standards and guidance published by international bodies.*

2.2 **Publications**

2.2.1 **Scientific Journals**

IOMP does not publish a scientific journal. *Physics in Medicine and Biology*, *Medical Physics* and *Physiological Measurement* are official journals of IOMP. IOMP also co-sponsors the *Journal of Applied Clinical Medical Physics*.

*Way Forward: IOMP should promote the promulgation, through printed and electronic journals, of new scientific knowledge and good practice in the field of medical physics and ensure that relevant publications are available to members, particularly those in developing countries.*
2.2.2 Books
IOMP has an agreement with Taylor and Francis (from 1991 to 2005 with the Institute of Physics Publishing (IOPP)) for the publication of the Medical Physics and Biomedical Engineering Science series of textbooks. IOMP nominates Commissioning Editors and Members receive a discount. IOMP also receives a fixed payment and a royalty for each book published.

Way Forward: The IOMP should promote the ‘Medical Physics and Biomedical Engineering Science’ series in liaison with Taylor and Francis.

IOMP should negotiate with other publishers to arrange discounts for medical physics books and other publications for members and, where possible, free copies or on-line access for members in developing countries.

2.2.3 IOMP Bulletin - Medical Physics World (MPW)
IOMP has published, twice yearly, a bulletin that is sent to every medical physicist via the National Organizations. A Subcommittee of the Publications Committee has reviewed the future of the MPW and proposes that Medical Physics World should be published electronically only, and that the printed version of the newsletter should no longer be produced. The newsletter should focus principally on news and articles related to educational and professional concerns and events related to medical physics on an international scale, with the ultimate objective of publishing four electronic issues per year.

Way Forward: To implement the decision of Council regarding the future of MPW and if it accepts the recommendations of the Subcommittee to move to publishing Medical Physics World electronically only, and that the printed version of the newsletter should no longer be produced. The newsletter should focus principally on news and articles related to educational and professional concerns and events related to medical physics on an international scale, with the ultimate objective of publishing four electronic issues per year by 2012.

2.2.4 History of IOMP
In 2008 a History Sub-Committee was formed with the following aims: To compile and archive IOMP activities from birth to present and to video interviews with individuals who have made major contributions to IOMP and/or to the advancement of medical physics profession worldwide.

Way Forward: To implement the above aims by 2012.
2.3 Websites and On-Line Materials

2.3.1 IOMP Website
The current IOMP website has limited facilities. A specific webmaster was appointed in 2008. A contract for a new website has been placed with Inch Communications Ltd, a UK based company. It is hoped that this will be completed and operational by the end of the year.

Way Forward: The new website to be commissioned and procedures put in place to ensure it is kept up to date and further developed.

2.3.2 Educational and Training On-line Resource Centre
The current IOMP website has limited information on the education and training and hosts very little educational materials.

Way Forward: A priority for IOMP is the establishment of an educational and training resource centre, primarily involving links to other sites or sources of education and training materials but also some materials which can be downloaded.

2.3.3 Global On-Line Medical Physics (GOMP) Textbook
The objective of the Global On-Line Medical Physics (GOMP) textbook is to improve medical physics education worldwide by making educational materials (such as textbook and chapters from books) available at the IOMP website to all medical physicists and students worldwide. At present the IOMP website has very limited online chapters and other reference materials.

Way Forward: To increase the number of textbook chapters and references on-line and integrate it as part of the Education and Training On-Line Resource Centre.

2.3.4 Scientific Database
Work is well under way under the auspices of the Scientific Committee in establishing a scientific database of medical physics reference materials, such as calibration protocols, survey and monitoring techniques, technological and scientific leading edge developments and relevant publications of general interest.

Way Forward: In parallel to the establishment of an Education and Training On-Line Resource Centre the IOMP will also, as a high priority, establish a scientific database of international (and selected regional and national) standards, protocols and guidance relevant to the practice of medical physics.
2.4 Research

IOMP is not currently involved in research in terms of either sponsoring or identifying new areas for research. The only current activity is dissemination of research through congresses and conferences.

Way Forward: The IOMP should identify new areas for research, education and training and promoting these.

2.5 Policy, Standards and Expert Advice

2.5.1 Policy Statements

Council requested in 2006 for a series of policy statements on key topics to be prepared. ExCom established a Working Group to prepare the first one “The Medical Physicists: Role, Education and Training” and this has been drafted for consideration by Council.

Way Forward: ExCom to continue to identify key topics and prepare draft policy statements for consideration by Council.

2.5.2 Medical Physics Standards

IOMP currently does not provide guidance on medical physics standards. However it sometimes nominates experts to help other Organizations to prepare guidance (see Section 3.10).

Way Forward: EXCOM to ensure that IOMP nominates, where appropriate, experts to assist other organisations in the preparation of medical physics standards.

2.5.3 Expert Advice

External organisations, in particular the various international organisations, such as IAEA or ICRP, regularly request the involvement of IOMP in the production of documents. IOMP has a specific policy and procedure for handling these requests ‘Documents Submitted to IOMP by External Organisations for Review, Comment or Endorsement’.

Way Forward: To implement the IOMP policy and procedure on documents submitted to IOMP or requests made to IOMP for expert advice.
2.5.4 Expert Assistance

The IOMP has a limited database of medical physicists who are willing to provide expert advice to organizations, hospitals, medical physics departments and individual medical physicists in developing countries.

Way Forward: To expand the database of “specialists” in various areas of medical physics.

2.6 Education and Training

2.6.1 List of Medical Physics Graduate Programmes

IOMP maintains, on its website, a list of graduate programmes. The details supplied are entirely the responsibility of the institution providing the programme. The list is currently neither up-to-date, nor comprehensive.

Way Forward: To bring the list of programmes up-to-date and expand the list of medical physics graduate programmes to include short international courses. Where other national lists of programmes are available then these should not be duplicated but a link inserted.

2.6.2 Model Curriculum, Validation and Accreditation of Medical Physics Programmes

The Education and Training Committee (ETC) is currently drafting proposals for a model curriculum for graduate medical physics programmes. This model curriculum will help to harmonize the medical physics programmes worldwide and will facilitate future validation of medical physics programmes.

Way Forward: This programme should continue but a report on accreditation be prepared for Council prior to any implementation.

2.6.3 EMITEL Project

The international project EMITEL has developed an Encyclopaedia for Medical Physics with Multilingual Dictionary. IOMP was of the project partners, the others were King’s College London and King’s College Hospital, University of Lund and Lund University Hospital, University of Florence, and the AM Studio, Bulgaria. EMITEL was financially supported by the EU Leonardo programme. Dr. Slavik Tabakov (former Chair of ETC and newly elected Treasurer) is the co-ordinator. The final report has been submitted to the EU and the outcome is awaited. The EMITEL web site (www.emitel2.eu) was officially launched at the opening of WC2009.
The encyclopaedia is available free on the Internet and includes a Multilingual Dictionary of Terms, which cross-translates the 3000+ specific terms in any of its 25 languages. See www.emitdictionary.co.uk. Each term is explained with an article (in English). Many articles include diagrams, images and tables. The overall volume of EMITEL is 2000+ pages.

Way Forward. To urgently assess and decide IOMP’s future involvement as an organization in this project.

2.7 Professional Matters

2.7.1 Classification of Medical Physics by International Labour Organization
IOMP has over many years worked to have the profession of medical physics recognised by the International Labor Organization and come under the general heading ‘Health Professionals’ rather than ‘Physics’ in the International Classification of Occupations (ISCO). There have been consultations by ILO and IOMP has lobbied on behalf of its members.

The ISCO classification has recently been updated and ILO has decided medical physics should come under Unit 2111 ‘Physicists and Astronomers’. However the definitive text has not yet been published. Following a meeting at ILO, a number of important changes were agreed by ILO and the final version of ISC-08 is expected shortly.

Way Forward: IOMP to issue guidance when ISC-08 is finally published and to monitor the impact of the inclusion of medical physics under Unit 2111.

2.7.2 Professional and Ethical Standards
A ‘Bill of Rights for Scientists and Engineers’ has been approved by Council Guidance is currently being prepared for national organizations on the contents of national Codes of Practice on the professional and ethical standards expected of medical physicists.

Way Forward: IOMP will prepare guidance only where a clear need has been identified.

2.8 Programmes for Developing Countries
Many of the activities of IOMP are of benefit to all medical physics worldwide. However, there is a special focus on helping medical physicists in developing countries. The following specific programmes are to support and assist the development of medical physics in developing countries.
2.8.1 Equipment Donation Programme
The aim of this programme is to encourage the donation of used equipment that is in good working condition to developing countries. This programme also facilitates the transfer of equipment to the recipient. However, IOMP has no funding for shipment and installation of the equipment and does not assume any liability for this transaction.

*Way Forward: To review the programme, including ways of linking it with other equipment donation schemes.*

2.8.2 Library Programme
The IOMP, with the support of the AAPM and publishers, provides free journals and textbooks to a list of libraries in developing countries. Also individuals donate their unwanted personal copies of journals and textbooks.

*Way Forward: The Library programme to continue but to be reviewed to ensure that there is an optimum balance between printed and on-line material and to explore new ways of increasing support*

2.8.3 Travel Assistance
This programme provides a limited number of grants to enable young medical physicists, in particular those presenting, to attend the World Congresses.

*Way forward: IOMP to place a high priority on expanding this programme by exploring new ways of funding, for example corporate sponsorship. However to review, in conjunction with IFMBE and IUPESM, the overall arrangements for support for medical physicists and medical bioengineers from developing countries to attend WCs. Also to expand the programme to all ICMPs.*

2.8.4 International Centre for Health Technology, including Medical Physics
A proposal for the establishment of an International Centre for Health Technology, including medical physics, has been put forward to further medical physics in developing countries. It is recognised that this would be a very major undertaking that would require substantial funding. Therefore this proposal could only be taken forward in partnership with other international organizations such as the International Centre for Theoretical Physics (ICPT), the International Council of Scientific Unions (ICSU), the International Union of Physical and Engineering Sciences in Medicine (IUPESM) and the World Health Organization (WHO).

*Way Forward: This proposal should be explored with the various organisations mentioned.*
2.9 Awards and Honors
The IOMP currently has two awards, The Marie Sklodowska-Curie Award and the Harold Johns Award. It also selects and administers the IUPAP Young Scientist Award in Medical Physics. The IOMP has no named lectures, nor honorary membership. There are proposals being considered by Council for the establishment of Fellowship membership which would be awarded for service to the IOMP.

Way Forward: To establish a named lecture at ICMPs. To advice Council on the establishment of honorary membership to raise the profile of IOMP and to recognise the achievements and service by distinguished medical physicists. To implement Council’s decision on ‘Fellow of the IOMP’. To review and submit to Council recommendations for revising the Award Policies and Procedures.
3. EXTERNAL RELATIONS

3.1 The Biomedical Engineering Community

There is a significant overlap in many countries in the work of medical physicists and medical (bio-) engineers, particularly in the fields of instrumentation, non-ionising radiation and the physiological sciences. A number of national organizations cover both professions and see an integrated approach as the best way to further the development of the application of the physical and engineering sciences to healthcare. In other countries, the two professions are more distinct and operate independently of each other.

At present, IOMP has very limited direct contact with the International Federation of Medical and Biological Engineering (IFMBE). Our links with it are through our union, the International Union of Physical and Engineering Sciences in Medicine (IUPESM) which connects us (IOMP and IFMBE) to the International Council of Scientific Unions (ICSU). Currently IUPESM has a limited range of activities, mainly focused in arranging the World Congresses and provides links to the ICSU. The following is a summary of the IUPESM objectives:

- to contribute to the advancement of physical and engineering science in medicine for the benefit and well being of humanity;
- to organise international co-operation and promote communication among those engaged in health-care science and technology;
- to co-ordinate activities of mutual interest to engineering and physical science within the health care field, including international and regional scientific conferences, seminars, working groups, regional support programmes and scientific and technical publications;
- to represent the professional interests and views of engineers and physical scientists in the health-care community.

Both professions (IOMP and IFMBE) are relatively small on a world scale and increased collaboration should be pursued where it would be beneficial in taking medical physics forward and representing the views of medical physicists at other forums.

Way Forward: To increase collaboration and working together with the medical engineering community, both by direct collaboration with IFMBE and through IUPESM.
3.2 International Council of Scientific Unions (ICSU)
The IOMP is a member of the International Council of Scientific Unions (ICSU) through IUPESM. Our membership with ICSU offers the potential for grants and collaborative working with other unions. Currently the IUPESM has put forward, in association with other Unions, detailed proposals for an ICSU programme ‘Science for Health and Wellbeing’.

Way Forward: To continue to participate through IUPESM and in particular consider how medical physics can best contribute to the programme ‘Science for Health and Wellbeing’.

3.3 International Union of Pure and Applied Physics (IUPAP)
The IOMP has a formal relationship with the International Union of Pure and Applied Physic (IUPAP), which recognises IOMP as an Affiliated Commission of the IUPAP. IOMP has established an IComMP Committee within IOMP.

Way forward: To broaden and strengthen IOP activities and links with the academic physics community through the IUPAP Organization.

3.4 International Atomic Energy Agency (IAEA)
The IOMP is recognised by the International Atomic Energy Agency (IAEA) as a collaborating Organization, in particular in relation to the IAEA and WHO (World Health Organization) network of the SSDLs (Standards and Secondary Standards Dosimetry Laboratories). The IAEA is a key partner in education and training for developing countries.

Way forward: To further strengthen links with the IAEA.

3.5 World Health Organization (WHO)
The IOMP currently has no formal links with the World Health Organization (WHO). The biomedical engineering Organization IFMBE is recognised as a non-governmental organization (NGO) by the WHO.
Following recent a recent meeting with WHO it has been agreed to sign a formal Memorandum of Understanding (MoU) and develop a programme of activities with WHO.
Way Forward: To finalise the MOU and to identify and establish a programme of activities with WHO. After two years to review the position with WHO and decide whether to formally apply for recognition as an NGO or to support an application by IUPESM for NGO status.

3.6 International Society of Radiology (ISR)
The IOMP has been organising joint sessions with the International Society of Radiology (ISR) at their conferences but there are no formal links.

Way Forward: The IOMP to establish a formal link and continue with joint sessions and undertake other joint activities with ISR which will further medical physics.

3.7 International Commission on Radiation Protection (ICRP)
The IOMP has been organising joint sessions at the World Congresses with the International Commission on Radiation protection (ICRP) but there are no formal links. Also IOMP comments on ICRP draft documents from time to time. In view of the importance of ICRP guidance on the radiation protection legislation of countries and the work of medical physicists, the IOMP should ensure that it fully participates in the work of ICRP that affects the use of radiation in the healthcare by considering draft documents and by other means.

Way Forward: IOMP to establish a formal link with ICRP.

3.8 International Commission on Radiation Units (ICRU)
The International Commission on Radiation Units (ICRU) recognises the IOMP and corresponds with it. The IOMP comments on draft ICRU documents when appropriate but there are no formal links.

Way Forward: IOMP to establish a formal link with ICRU.

3.9 International Labour Organization (ILO)
The IOMP has no formal links with International Labour Organization (ILO) but has been in direct communication with them for a number of years in connection with the classification of medical physics as a profession. See section 2.7.1
Way forward: To continue to pursue the ‘Way Forward’ as set out in the section 2.7.1

3.10 International Union Pure and Applied Biophysics (IUPAB)
In order to further the advancement of medical and biomedical physics towards all areas of the biosciences, and to strengthen links between medical physicists and biophysicists and related scientists, IOMP, in 2008, sort a formal link to IUPAB. The outcome is awaited.

Way Forward: To continue to explore both joint activities and the establishment of formal links with IUPAB.

3.11 Other International Bodies
The IUPESM will be reviewing its role as a NGO (non-government organization) with a number of United Nations (UN) bodies.

Way Forward: IOMP to review the potential benefits and disadvantages of links with other UN bodies, either alone or through IUPESM/IUPAP.

3.12 Advice and Consultation
IOMP is often consulted by some international Organizations on draft documents. IOMP represents the worldwide medical physics community and many documents have a direct impact on the work of our members. Often the time allowed for review and comment is limited. IOMP has a specific policy and procedure for handling these requests ‘Documents Submitted to IOMP by External Organisations for Review, Comment or Endorsement’. IOMP does have any arrangement for being proactive in commenting on drafts when not specifically requested to do so. IOMP represents the worldwide medical physics community and many documents have a direct impact on the work of our members.

Way forward: To have expert members of the organization to review and comment on international drafts in a timely manner.

3.13 Public and Media
Currently IOMP does not have any significant input to the media and provides no direct information services to the public. There are two potential roles; one is to develop the website as a source of information for the general public. The other is to provide the names of experts in particular areas of medical physics on the web for the public reference.

Way Forward: The development of a public relations and media service should be a long-term goal. In the meantime the website should be developed to have limited but relevant information and provide links for the public and media.
4. ORGANIZATION AND FINANCE

4.1 Organization and Members
IOMP’s greatest resource is its members who spend their time voluntarily both in pursuing the objectives of IOMP and in the management of the organization. Financial matters are managed by the Council, elected Officers and Chairs. The administrative arrangements of the organization must be kept under review to ensure that they are optimised in order to enable the Organization to carry out its activities efficiently.

Way Forward: IOMP to make more use of its main resource, its members, by having a larger number of IOMP members to participate in IOMP activities.

4.1.1 Council
The IOMP Council is a large body, potentially with a membership of 121 (102 delegates and 29 ex-officio), but in practice about 100 individuals are active within the organization by having more than one role. Some members are inactive, especially those residing in national Organizations that are considered “not in good standing” – i.e. do not pay their annual dues on a regular basis.

Way forward: To encourage all members to actively participate in IOMP activities. Also to continue having one virtual Council meeting per year.

4.1.2 Executive Committee (ExCom)
At the WC-2009, the Council approved a change to the Statutes and Bylaws and Chairs of Committees are now full voting members of ExCom together with the officers (President, Past-President, Vice-President, Secretary-General and Treasurer). It usually holds two virtual meetings per year but business is also conducted between meetings by email.

Way Forward: ExCom should continue as constituted but improve the arrangements for holding virtual meetings and to hold at least one physical meeting between WCs.
4.1.3 The International Commission on Medical Physics (IComMP)

At present the link between IOMP and IUPAP is through International Commission on Medical Physics (IComMP) committee which has two components to its membership: one component from IOMP which includes 5 EXCOM members (with President as Chair), three Chairs (Education & Training, Science, Professional Relations), and a maximum of 4 individual members who are interested in the objectives and charges of this committee. The other component is from IUPAP which includes a delegate from the IUPAP Council and a maximum of 4 individual members from other IUPAP commissions with common interests with IOMP. At present the links between IOMP and IUPAP and the membership of IComMP are being developed.

Way Forward. To identify and appoint the external members of the IComMP. Also take forward the remit of the IComMP Committee and through the IComMP broaden and strengthen IOMP's activities and links to the academic physics community.

4.2 Secretariat

The Secretariat is currently located either where the Secretary-General is located, or, as at present, at the national medical physics headquarters of the country where the Secretary-General is located. There is limited funding available for running the secretariat, approximately one person-day per week. The current level of support is insufficient and the Secretary-General undertakes duties that could be done by a secretariat. This would be assisted if the secretariat had a permanent location. There would be considerable advantages and cost savings if the three Organizations, IOMP, IFMBE and IUPESM had a common secretariat at a permanent location.

Way Forward: To provide a more permanent cost-effective location for the secretariat of IOMP. Also to develop the secretariat as IOMP activities grow and to explore the advantages of a joint secretariat with IFMBE and IUPESM.

4.3 Financial Affairs

The main sources of the organization’s income are membership dues and profit share from the World Congresses and ICMPs. The table shows summarised income and expenditure and also the total assets of IOMP over the last four years (excluding the accounts of MPW).

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</thead>
<tbody>
<tr>
<td>Country Dues</td>
<td>51,263</td>
<td>53,060</td>
<td>42,110</td>
<td>36,170</td>
<td>36,313</td>
<td>36,388</td>
<td>32,423</td>
<td>35,601</td>
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<tr>
<td>Corp. Dues</td>
<td>1,500</td>
<td>500</td>
<td>1,000</td>
<td>2,000</td>
<td>2,000</td>
<td>1,500</td>
<td>-</td>
<td>10,000</td>
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<tr>
<td>Conferences</td>
<td>10,192</td>
<td>25,000</td>
<td>3,000</td>
<td>-</td>
<td>29,614</td>
<td>-</td>
<td>16,098</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>5,922</td>
<td>9,023</td>
<td>17,477</td>
<td>2,761</td>
<td>1,325</td>
<td>2,211</td>
<td>7,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>58,685</td>
<td>72,775</td>
<td>85,587</td>
<td>43,931</td>
<td>39,638</td>
<td>69,713</td>
<td>39,423</td>
<td>62,179</td>
</tr>
</tbody>
</table>

**EXPENDITURE**

| Activities | 30,276 | 16,143 | 29,490 | 9,685 | 12,939 | 15,804 | 4,775 | 22,007 |
| Admin. & Travel | 13,780 | 7,489  | 14,121 | 10,956| 13,765 | 9,178  | 7,627 | 7,735 |
| IUPESM      | 10,440 | 10,000 | 10,000 | 10,000| 10,000 | 10,000 | 10,000 | 3,658 |
| Other       | 0      | 0      | 5,543  | -    | -      | 2,424  | 6,025 | - |
| **Total Expenditure** | 54,496 | 33,632 | 59,154| 30,641| 36,704 | 37,406 | 28,427 | 33,400 |

**BALANCE**

| TOTAL ASSETS | 330,472 | 336,117 | 291,574 | 213,045 | 199,580 | 196,646* | 164,439 | 153,441 |

* Change in accounting procedures

It should be pointed that from 2004 the Annual Accounts included the MPW accounts but these have been excluded from the above table for comparison purposes. It should also be noted that changes in the exchange rates affect the figures and so the total assets do not exactly reflect the changes in annual balances.

The net current (end of 2008) assets of US$330,472 have risen from US$124,662 at the end of 2000.

These assets represent about 5 year’s turnover (excluding MPW) and are adequate reserves. The IOMP should not plan to further develop its reserves. However, additional regular revenue is required to increase the IOMP’s activities.

Suggested mechanisms for increasing the income of IOMP:

- Increase dues by 10% to US$3.3 - US$5,000.
- Increase corporate membership – US$10,000.
- Income from WC and ICMP – average a further US$10,000.

This gives an annual income of about US$75,000. Other potential sources of income are:
• Overheads from project grants.
• Donations.

These should be used for specific purposes.

Way Forward: To increase IOMP income by 20% over a three-year period and to maintain reserves of 3 years expenditure.
5. STRATEGY

5.1 Strategic Themes
The aims, objectives, activities and priorities of IOMP can be grouped under five linked strategic themes, each with a number of (abbreviated) objectives:

1. **Supporting the work and professional status of medical physicists by disseminating knowledge and guidance and by promoting research:**
   - Development of the WC.
   - Successfully further develop new series of regional ICMPs.
   - Increase funding for Sponsored meetings.
   - Develop an on-line scientific database

2. **Furthering the educational, training and professional development of medical physicists by supporting the development and dissemination of educational and training materials and by promoting international harmonisation and accreditation:**
   - Create an on-line education and training resource, incorporating GOMP.
   - Update list of the post-graduate courses and provide a list of international short courses.
   - Develop a model curriculum for post-graduate courses.
   - Review requirement for, and role of IOMP, in accreditation of courses.
   - Promote the State recognition of medical physicists

3. **Promoting the advancement of medical physics in developing countries:**
   - Review, maintain and develop existing programmes (travel, library and equipment).
   - Enhance and develop a list of medical physics experts willing to assist developing countries.
   - Facilitate on-line access to journals and books and negotiate discounted prices for books.

4. **Ensuring that the views of the worldwide medical physics community are represented in the development of relevant international policies, procedures and guidance and that medical physicists contribute, appropriately, to the development of the application of science to healthcare.**
• Implement arrangements for commenting on documents.
• Increase collaboration with the medical engineering community.
• Develop links with the IUPAP.
• Establish formal links with the WHO and review and develop links with other external bodies.

5. Developing the infrastructure and resources to fulfil IOMP’s mission.

• Implement new IOMP web site.
• Implement outcome of review of MPW.
• Facilitate formation of new Regional Organizations and national organizations.
• Increase corporate membership to at least 10 members and review their role in IOMP.
• Increase overall funding by 40%.
• Develop secretariat and arrange permanent location for secretariat, jointly, if possible, with IUPESM and IFMBE.

5.2 Priorities

There was considerable unanimity in views expressed by Officers, Committee Chairs and Council members on the way forward and priorities for IOMP during the preparation and consultation on this document.

• Support for developing countries.
• Development of a virtual resource centre on education, training and scientific matters.
• Promoting meetings, in particular the new ICMP regional conferences.

There are three main avenues to achieve these activities:

• Increased finance. Whilst increased efforts and other developments may bring about modest increases in direct funding, the main increase may be through corporate sponsorship of particular activities and events. However many activities require very little finance.
• Enhanced website. There was universal support for this to facilitate the development of the virtual education, training resource centre and the scientific database as well as improving communication with members.
• Greater involvement of members. There is a need to increase the profile of IOMP amongst its members and encourage greater participation by members in IOMP's activities. This requires providing a wider range of opportunities for that involvement.
### 6. SPECIFIC PROPOSALS WITH ASSIGNED PRIORITIES FOR 2009-2012

#### 6.1 Activities for 2009-2012 by Committee

<table>
<thead>
<tr>
<th>Committee /Group</th>
<th>Activity</th>
<th>Section</th>
<th>Target and Date</th>
<th>Responsibility</th>
<th>Comment</th>
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<tbody>
<tr>
<td>Website WG</td>
<td>Establish new website.</td>
<td>2.3</td>
<td>Completed March 2010.</td>
<td>Chair of Group.</td>
<td>From reserves</td>
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<tr>
<td>ICMP 18</td>
<td>Organise ICMP in collaboration with local national Organization.</td>
<td>2.1.2</td>
<td>Successful and profitable meeting</td>
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<td>ETC</td>
<td>To continue and develop current programme of activities:</td>
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<td>On-going</td>
<td>Chair</td>
<td></td>
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<tr>
<td></td>
<td>• Sponsor/endorse meetings</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Arrange sessions/seminars at meetings</td>
<td>2.6.1</td>
<td></td>
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<tr>
<td></td>
<td>• Grad. Programmes</td>
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<td></td>
<td>• ISEP</td>
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<tr>
<td></td>
<td>On-line Education and Training Resource Centre</td>
<td>2.3.2</td>
<td></td>
<td>Chair or designated individual</td>
<td>In collaboration with Website WG.</td>
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<tr>
<td></td>
<td>Model Curriculum &amp; Accreditation</td>
<td>2.6.2</td>
<td>Report to Council. 2010</td>
<td>Chair WG</td>
<td>Special WG</td>
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<tr>
<td></td>
<td>Staffing Requirement for MPs.</td>
<td>3.4</td>
<td>Report to Council &amp; IAEA. 2009 -2011</td>
<td>Chair/ designated person</td>
<td></td>
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<td><strong>SciCom</strong></td>
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<td>• Sponsor/endorse meetings</td>
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<td><strong>2.1</strong></td>
<td>On-going</td>
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<td>Chair</td>
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<td></td>
<td>In collaboration with Website WG.</td>
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<tr>
<th><strong>Expert Assistance.</strong></th>
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<th>Develop database</th>
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<td></td>
<td>Implementation &amp; funding subject to report.</td>
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<td>• Library programme</td>
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<td></td>
<td>• Travel assistance</td>
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<td>• Equipment programme</td>
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<td></td>
<td>• Arrange sessions/seminars</td>
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<td></td>
<td>• Sponsors/endorse meetings</td>
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<td></td>
<td>• Standards</td>
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<td><strong>2.8.1</strong>&lt;br&gt;<strong>2.8.2</strong>&lt;br&gt;<strong>2.8.3</strong>&lt;br&gt;<strong>2.1.1</strong>&lt;br&gt;<strong>2.1.2</strong>&lt;br&gt;<strong>2.1.3</strong>&lt;br&gt;<strong>2.1.5</strong>&lt;br&gt;<strong>2.5</strong></td>
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<tr>
<th><strong>PubCom</strong></th>
<th>MPW and change to electronic</th>
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<td><strong>2.2.3</strong>&lt;br&gt;<strong>2.2.4</strong>&lt;br&gt;<strong>2.2.5</strong>&lt;br&gt;<strong>2.2.6</strong></td>
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<tr>
<td></td>
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<td>Books and Journals, Availability to members, particularly in developing countries</td>
<td>2.2.1 2.2.2</td>
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<td>Finance Committee</td>
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<td>Corporate membership</td>
<td>1.3.3 4.3</td>
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<td>Awards &amp; Honours</td>
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<td>To continue current programme of activities:</td>
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<tr>
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<td>• Manage IOMP awards</td>
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<td>• IUPAP Young Sc. Award</td>
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<td>Establish named IOMP lecture.</td>
<td>2.1.1 2.1.2</td>
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<td>Establish Fellowship</td>
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<td>Category</td>
<td>Task</td>
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<td>Rules</td>
<td>Establish category of Hon. Member.</td>
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<td>Continue carrying out charge of Committee.</td>
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<td>Nominating</td>
<td>Continue carrying out charge of Committee</td>
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<td>To continue current programme of activities:</td>
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<td>- Executive action.</td>
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<td>- Act for Council</td>
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<td>- Appointments</td>
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<td>- Represent IOMP</td>
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<td>1. Maintain and develop administrative support.</td>
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<td>Links to</td>
<td>3.5 Report to Council Annually</td>
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<td>external</td>
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<tr>
<td>bodies.</td>
<td>1. Strengthen/form links with IAEA/ICRP etc</td>
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<td></td>
<td>2. Increase collaboration with biomedical engineering community.</td>
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<td>WHO. Formalise links</td>
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<td>EMITEL</td>
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</table>
6.2 Conclusion

There are a number of activities that IOMP can take forward by with modest funding if members are prepared to give their time, expertise and enthusiasm. The main exceptions to this are items such as travel awards and sponsorship.

This Section sets out a challenging set of objectives and activities for the 2009-2012 period and the plan will need to be kept under review by ExCom, the Committees and Council and amended as necessary.