

**Report on the Fifth Meeting of the Steering Committee for the
International Action Plan for Occupational Radiation Protection
(IAPORP)
15–17 June 2011
TM-40988
IAEA Headquarters, Vienna**

Background

The first International Conference on Occupational Radiation Protection was held in Geneva from 26 to 30 August 2002. It was organized by the IAEA, which convened the Conference jointly with the International Labour Office (ILO). It was co-sponsored by the European Commission (EC) and held in cooperation with the World Health Organization (WHO) and OECD Nuclear Energy Agency (NEA) and a number of other international organizations. The Conference produced a number of important findings and recommendations. These were considered in September 2002 by the IAEA General Conference, which requested the IAEA's Director General, in cooperation with the ILO and other relevant bodies, to formulate and implement an action plan.

The IAEA in collaboration with the ILO prepared a draft that was reviewed by the organizations and key participants involved in the Geneva Conference as well as by the International Confederation of Free Trade Unions (ICFTU) and the International Organisation of Employers (IOE). The IAEA Board of Governors approved the Action Plan on 8 September 2003. In order to ensure the successful implementation of the Action Plan, the IAEA with the support of the ILO established a Steering Committee (SC) with the overall remit to advise on, monitor and assist in the practical implementation of the International Action Plan (IAP). The Steering Committee comprises representatives of countries from the different world regions as well as most international organisations dealing with occupational radiation protection (WHO, NEA OECD, EC, UNSCEAR...). The First, Second, Third and Fourth Meetings of the Steering Committee were held in Vienna on 4-6 February 2004, 25-27 January 2006, 28-30 January 2008 and 15-17 February 2010 respectively.

Summary

The Fifth Meeting of the Steering Committee was held in Vienna, 15-17 June 2011. Seventeen participants attended the meeting (see Appendix 3). The first one and half days consisted of oral presentations, by ILO, and IAEA representatives, on the status of each action still in progress since the last meeting or completed but with follow up actions of the IAPORP. From the discussions following these presentations the Steering Committee concluded that all 14 actions had been successfully completed. Therefore the Steering Committee proposed that the IAPORP should be closed.

The following afternoon was devoted to current activities on occupational radiation protection, including education and training carried out by the IAEA and other international organisations (ILO, EC, NEA, UNSCEAR and WHO).

The last morning, after two presentations from IAEA and UNSCEAR on the implications of the Fukushima accident on occupational exposures, IAEA, ILO, WHO introduced a discussion on the future of the activities initiated by the Action Plan. The Steering Committee considered that many activities should be pursued as part of the regular activities of the Agencies (See Appendix 1 "Table of Conclusions" action by action) and that there should still be a requirement for continuing collaborating on the general area of occupational radiation protection. The Steering Committee urged the

international organisations to set up a mechanism to facilitate effective collaboration in this area. The Steering Committee noted that since the first International Conference on Occupational Radiation Protection (Geneva 2002) the context has evolved a lot in terms of international recommendations and standards such as ICRP 103 issued in 2007, revision of the BSS, new technologies (in particular in the medical sector), increasing trend of itinerant workers, implementation of radiation risk management in the NORM industries, feedback experience in decommissioning and post accidental situations. Therefore the Steering Committee recommended that the IAEA should consider convening the second International Conference on Occupational Radiation Protection in 2014 in collaboration with other international organisations.

A. Report

A.1. Welcome address

R. Czarwinski welcomed the participants on behalf of the IAEA, and stressed that the meeting was an opportunity for evaluating the Action Plan as a whole, discussing if it was time to draw a conclusion on it and to consider new approaches for the future.

S. Niu expressed his satisfaction with the collaboration between the IAEA and ILO on occupational radiation protection and appreciation for the guidance and support from the Steering Committee. He presented his high hope that the good collaboration between the ILO, IAEA and other international organizations could be continued in the future and wished for a very constructive and fruitful discussion during the meeting on behalf of the ILO.

R. Czarwinski introduced J. Ma as the Scientific Officer, and C. Lefaure as the Rapporteur. J. Ma proposed then M. Perrin as the chair for the meeting, which was agreed by the Steering Committee.

A.1.1. Approval of the meeting agenda

The draft agenda presented by J. Ma was approved without any modification (see Appendix 2).

A.1.2. Approval of the report of the 4th meeting

A few “English” comments were provided. With these modifications, the report was therefore approved (see Appendix 4).

A.2. Status of each action

As actions 1, 2, 3, 4, 5, 6, 7, 9, 11, 13, 14 were considered as completed at the last Steering Committee meetings, they are now general mandated activities for the IAEA and the other collaborating organizations. The Committee focused its discussion on the follow up activities in the areas covered by these actions and the efficiency of their inclusion into the regular activities of the Agencies and the other collaboration organizations. As for actions 8, 10 and 12, the Committee noted with satisfaction that significant progress had been made and proposed ways to continue and expand these actions in future regular activities of the Agency.

A.2.1 Actions considered as completed in 2010

Actions 1, 2, 3, 4, 5, 6, 7, 9, 11, 13, 14 were considered as completed by the Committee since the last meetings.

S. Niu presented background, ongoing activities and future considerations for actions 1, 2, 3, 4; all of them had been considered in the implementation of the regular programmes of the Agencies. The Steering Committee was globally happy with such arrangement and did not raise any new recommendation.

Action 1: *ILO, supported by the IAEA, to take steps to further promote the ratification and implementation of ILO Convention 115.*

Presentation

S. Niu reminded that a total of 48 Member States had ratified Convention No. 115, the latest ratification was done in 2008 by Luxembourg.

Promoting this Convention is an ongoing regular activity of the ILO. IAEA will continue promoting this Convention through its TC regional meetings.

Conclusion

The Steering Committee took note of the information provided by the ILO and IAEA on this action.

Action 2: *ILO to consider whether there is a need to review the procedures for requesting information on the implementation of ILO Convention 115 from Member States and the types of information being requested, so that peer reviews of occupational radiation protection programmes become more effective. Lessons learned from the application of the reporting criteria applied under the Convention on Nuclear Safety (IAEA document INFCIRC/449) may be a useful input.*

S. Niu presented the ILO's supervision mechanism on the annual review of the application of the ILO Conventions and Recommendations by its Member States. He briefed the Committee on the review of the application of Convention No 115 by Member States in the last ten years. He informed the Steering Committee that ICRP recommendations and the BSS provided part of the legal basis for examination of the implementation of Convention No.115 and Recommendation No.114.

Conclusion

The Steering Committee took note of the information provided by the ILO and IAEA on this action.

Action 3: *The IAEA and ILO to continue to cooperate in the development of guidance and information material that will assist in the interpretation of requirements set out in conventions and standards, and in the conduct of further IAEA intercomparison of monitoring methods for assessing occupational exposure.*

Presentation

S. Niu reported to the Steering Committee that an ILO note on "Radiation Protection of Workers" issued in April 2011 within the Safework Information Note Series provided information on the size of

occupationally exposed workforce and the relevant ILO instruments on radiation protection of workers. This document exists also in several languages such as French, Japanese and Spanish. He mentioned that the ILO is committed to promote internationally accepted standards in particular the BSS.

Following a question from T. Zodiates, R. Cruz Suarez, reported that IAEA had continued the development and implementation of the Occupational Radiological Protection Appraisal Services (ORPAS) missions and the development of the Self Assessment Tool (SAT). He also reported that the intercomparisons programme has been continued all over the world. He then proposed also to make use of that tool, not only for assessing the implementation of the BSS but also for assessing the implementation of ILO Convention 115.

Conclusion

The Steering Committee took note of the information provided by the ILO and IAEA on this action.

Action 4: ILO, in consultation with the IAEA, to consider the concerns over the terminology used in the Code of Practice and to determine the most appropriate means of addressing them.

Presentation

S. Niu explained that the ILO code of practice “Radiation Protection of Workers” initially issued in 1987 had been reviewed for harmonisation of terminology with other Agencies’ terminologies a few years ago. Efforts had been made to promote the use of harmonized terminology in the joint development of the BSS including its revision. This was reached with a consensus of the concerned parties.

Conclusion

The Steering Committee took note of the information provided by the ILO and IAEA on this action.

Action 5: ILO to make the list of contact points in its Member States and field structure available to the IAEA, which should inform the contact points about the latest available standards, guidance and advice developed at the international level and invite their representatives to relevant workshops, seminars and conferences.

Presentation

R. Cruz Suarez reported that the development of the data-base is now done under ORPNET and ready to be “issued”. He emphasized that initially it was restricted to IAEA and ILO; later on it had been expanded to WHO and UNSCEAR. The main objectives were to take advantage of regional coordination - meetings - training courses for inviting all 4 organisations, and developing other common activities. R. Cruz Suarez pointed out that legal problems had been raised in relation to confidentiality of the data, on malicious use of the database for spreading spam and viruses and emails attacks.

Discussion

F. Shannoun reminded that there is a need for the Agencies to produce urgently the Terms of Reference for the updating and use of the database. C. Lefaure proposed as an answer to the legal

problem, that the database should be only accessible by international organisations and contact persons in a secure part of ORPNET, as done within the ISOE database for many data.

Conclusions

The Steering Committee noted that the database is now ready and will be made available on the ORPNET website as well as the terms of reference for the management of the database.

The Steering Committee suggested that for avoiding legal problems, the database should be only accessible by international organisations and contacts persons in a secure part of ORPNET.

The Steering Committee noted that the action had been totally included into the routine cooperation of the four international entities (ILO, IAEA, WHO, UNSCEAR).

Action 6: The IAEA, in consultation with ILO, to develop publicity materials in the form of posters and leaflets that target groups of workers identified as likely to benefit directly from the information provided — for example, workplace material designed to reduce the number of near misses and the risk of serious accidents.

Presentation

A. Luciani reported to the Steering Committee that, the seven posters are now available in English. They have been issued after receiving the comments from Steering Committee members. As requested by the Steering Committee, the seven posters are posted on the ORPNET website (see action 7) and available for being downloaded. They are also available on CD and as paper copies.

Discussion

Steering Committee members congratulated again IAEA for preparing such good material. The Steering Committee reminded IAEA that it should be made available also in the other five official languages of the IAEA. J. Ma answered that resources for translation were required from a TC program as no funds could be released from the regular budget. He confirmed that as soon as they obtain funds, the translation of the posters would be done and the translated posters be posted on ORPNET. He also confirmed, as written on ORPNET, that IAEA allows any Member State to translate without copyright the posters into other languages, similar to the IAEA publication, but without any endorsement of the translation by the Agency; China had already decided to translate these posters.

The Steering Committee urged the IAEA to widely advertise these posters and other existing materials among Member States and target group representatives.

Conclusion

The Steering Committee took note of the information provided by the IAEA on this action and was happy with the confirmation that the Agency would make efforts to mobilize resources for the translation of the posters into the other 5 official languages and to launch a proactive advertisement policy.

Action 7: The IAEA to provide a focal point, on a website, where networks may be established for exchanges of information, experience and lessons learned between interested parties.

Presentation

J. Ma presented the policy implemented by the Agency for supporting the development of networks. He reminded the participants that the IAEA is an observer in the European ALARA Network (EAN), acts jointly with the NEA as Secretariat of the ISOE network for NPPs and, furthermore, functions as an ISOE Technical Centre for 10 non-OECD countries; he also mentioned the IAEA participation to the Expert Group on Occupational Exposure (EGOE) as an observer. He informed the Steering Committee that IAEA has continued to support, through its Technical Cooperation and Regional Projects, the two regional networks set up by the Agency: the Regional East European And Central Asian Countries (RECAN) which has already organised six workshops, and the Asian Regional ALARA Network, which has already organized three workshops. He informed the Steering Committee that a third regional ALARA Network, the RePROLAN, is on the point to be set up in Latin America. He indicated that the first two networks should continue to be financially supported by the Agency, even if through new means in 2012 and 2013. He also presented the request from EAN to set up a coordination of all existing networks.

J. Le Heron reported the evolution of the International System on occupational Exposure in Medicine, Industry and Research (ISEMIR) which has been launched in January 2009 and has led to the setting of two groups; one on Interventional Cardiology (WGIC) since 2009, and one on Industrial radiography (WGIR) since 2010. He presented the main results of the first international surveys performed among the different interested stakeholders as well as the tools that are under development (road maps) or will soon be in development (international data base on doses, practices and events), and explained that data will be collected directly among facilities.

C. Lefaure introduced the ORPNET website which has been set up last October as “focal point for the networking in occupational radiological protection”. He presented its main functions (link with each network; FAQ on ALARA; hosting the ISEMIR website; providing news in occupational radiation protection). J. Ma presented then the management system set up within the Agency for running the website both in terms of contents and technical aspects.

Discussion

A large discussion took place on these three items. The Steering Committee remained in favour of further supporting the existing networks and setting up new networks in Africa, and Middle East. M. Kharita asked if following the stop of financing of ARAN through the RCA and its replacement by TC funding one should envisaged to expand the regional participation to Middle East countries; this is confirmed as a possibility by P.P. Haridasan. R. Cruz Suarez pointed out the importance of finding complementary private funding. L. Matta gave more information about RePROLAN, its objectives and goals as well as about its intention of producing a newsletter, and he presented a request of being advertised on ORPNET ASAP.

As well the Steering Committee congratulated the Agency for the ISEMIR initiative and its interesting promising outputs and requested the IAEA senior management to provide resources for running the system efficiently. Several points dealing with WGIC were discussed (eye dose, discrepancies on doses between operators, utilities and regulatory bodies,...). The Steering Committee supported the idea of the IAEA to take the opportunity of international events such as the next IRPA congress, to

organize meetings with all network coordinators. K. Case advised to contact R. Coates for organizing it in Glasgow.

Finally the Steering Committee members appreciated particularly the ORPNET website as an efficient answer for action 7 and requested the IAEA either to post all material and publications from IAPORP on that website or to advertise them on ORPNET, providing links to other parts of the IAEA, ILO websites, where they are posted. It was also requested that ORPNET works as RPoP, with a room for questions and suggestions and a mailing list for publicising news and updates.

Conclusions

The Steering Committee took note that Action 7, which was already completed, gave rise to very positive follow up actions.

The Steering Committee took note of the continuing ongoing support of the IAEA to the existing networks, of the setting up of a new network in Latin America and of the absence of such regional networks in Africa and in the Middle East.

The Steering Committee recommended to the IAEA to continue supporting financially in the coming years the existing regional networks and to facilitate the setting up of new networks where there is no.

The Steering Committee appreciated the first very promising results of the ISEMIR and requested the IAEA to provide adequate resources for running efficiently the system.

The Steering Committee considered the ORPNET as being the adequate answer to action 7 specific objective, and requested the IAEA to promote it adequately, as done currently for the IAEA patient website (RPoP), and to give access on it to the IAPORP outputs.

The Steering Committee strongly recommended to the IAEA to facilitate ORPNET access through a specific address as done very successfully with the IAEA patient website (RPoP).

Action 9: The IAEA, in consultation with professional medical bodies such as the International Society of Radiology, to critically examine existing postgraduate education and awareness-raising packages for medical professionals, including those now being produced by the ICRP, to establish the need for the development of further material, to develop further material as necessary and to disseminate the material developed.

Presentation

The action 9 was already considered as completely implemented. Therefore O. Holmberg presented all the new training material developed within the regular activities since the last Steering Committee meeting. One is dealing with Radiation protection in paediatric radiology, another with radiation protection in digital radiology; several already existing training packages have been translated recently into Spanish (5), Russian (4). As well many regional training courses for health professionals in hospitals have been organized, while national ones were supported. CDs have been created with all material for training. Professional societies are given permission to make copies of the CDs for their members and all existing training materials have been made freely available on the RPoP IAEA website (900 000 hits per month).

Conclusion

The Steering Committee takes note that regular activities are on going and that many new training material have been issued or translated into different languages and disseminated through many channels.

Action 11: In support of its programme on exposure to natural radiation, the IAEA to assist authorities in identifying activities involving exposure to natural radiation that may need to be controlled, and to generate and disseminate additional sector-specific information on radioactivity levels, exposure conditions, and chemical and physical characteristics of airborne pollutants in workplaces involving naturally occurring radioactive material.

Presentation

P.P. Haridasan presented the activities implemented by the Agency within the scope of Action 11 (already considered as completed in 2010) since the previous Steering Committee. The IAEA safety Report No 68 "Radiation Protection and NORM residues management in the Production of rare Earths from Thorium containing Minerals" is under publication; while the final consultancy meeting for Phosphate industry took place last February and the final draft on that topics will be available in August, and while the final consultancy meeting for the Titanium dioxide industry is planned for the fourth quarter 2011. Three more additional reports are planned (Industrial use of Thorium; Metal Production Industries, Coal and coal ashes). During the same period some new training materials have been made available or are in the process of being completed: generic material on NORM, specific on Oil and Gas. One regional training course was organised in Abu Dhabi.

Conclusions

The Steering Committee takes note that a third industry specific safety report on Rare Earth Industries will be published within 4 months, while the final draft of the Phosphate Industry report will be available in August 2011 and will then go to the Publication Committee, and while the Titanium Dioxide Industry report has still to be completed.

The Steering Committee takes note that some new training materials have been published in 2010.

Action 13: The IAEA to review current information on the issue of standards for the protection of pregnant workers and their embryos and foetuses in order to determine whether the issue warrants action at the international level. In addition to the work described in the presentations made at the Geneva Conference, relevant work has been done in a number of countries and by a number of bodies (such as ICRP).

Presentation

R. Cruz Suarez reported that since the last meeting the draft Safety Report was finalized except one Annex on internal doses. He regretted that it was still the case at the moment of this reporting as IAEA was still waiting for the new conversion factors to be published by the ICRP.

Discussion

A hot discussion was provoked by the report. It was pointed out that waiting too long would make the core contents of the document becoming obsolete; it was also reminded that there was a real need for this document at the operational level. Therefore it appeared preferable to publish it as it is now without waiting for the new conversion factors, which are not expected to be available before 2014. It would be easier to update the Annex with the new conversion factors when they are published later.

Conclusions

The Steering Committee takes note of the information provided by the IAEA on this action. It urges the IAEA to start the publication process without waiting for the ICRP to provide new conversion factors.

The Steering Committee recommends publishing this Safety Report on the ORPNET site ASAP.

Action 14: The IAEA, in collaboration with ILO, WHO, NEA and other relevant bodies and drawing on the experience of other stakeholders, to continue its work on developing international guidance for aiding decision-making on the attribution of cases of detrimental health effects to occupational exposure to ionizing radiation.

Presentation

S. Niu reported to the Steering Committee that the document jointly prepared by IAEA, WHO and ILO was published by the ILO on behalf of the IAEA and WHO in 2010. Therefore the main issue now would be the promotion of the application of the document and eventually its transposition to other types of occupational risks.

Discussion

During the discussion the Steering Committee members congratulated again the three Agencies for such a successful cooperation. The Steering Committee reminded its recommendation from last Steering Committee meeting that the Agencies track any feedback on the document and keep into consideration all evolutions of scientific developments as well as of compensation schemes. If needed this should lead to an updating in the future of the document. As for the promotion, the document should be presented on ORPNET.

Conclusions

The Steering Committee takes note of the information provided by the ILO and IAEA on this action with satisfaction, congratulates for the very successful inter-agencies' cooperation on this action and is very pleased to note that the ILO, on behalf of the 3 collaborating organizations, published the document in 2010.

The Steering Committee asks for this publication to be introduced immediately on the ORPNET site with a link to the downloadable file on the ILO website.

All eleven actions mentioned above were considered as completed in 2010. They still need to be continued and followed up through the Agencies' regular activities.

A.2.2 Actions considered as still in progress in 2010

These actions are namely actions 8, 10, and 12

Action 8: The IAEA, in consultation with ILO and drawing on the experience of trade unions and other stakeholder organizations, to prepare and disseminate suitable information materials to workers' representatives and labour educators in order to promote a better informed workforce and better understanding generally among those concerned with exposure to radiation.

Presentation

P.P. Haridasan reported on the status of action 8. He presented the two pages document issued rapidly after the last Steering Committee meeting and reminded the goals and target audience of the document. The main objective was to give useful and practical information to workers' representatives, labour educators and workers on the basic concepts and the most appropriate and practical measures on radiation protection. The target audience of the information material are the workforces and their representatives and labour educators who have no opportunity to go into controlled (or even supervised) areas and, therefore, are not expected to receive a specific training. He emphasized that it is not any more a training material but an information material.

He presented then the redrafted document and proposed as a title: "**Understanding and Explaining Radiation: A Handbook for Labour Educators and Workers**". He informed that the new draft has incorporated remarks and comments from several members of the Division and the members of this Committee. The ILO had reviewed the new draft. A preface and a glossary would be added and new pictures would be inserted to the new draft.

Discussion

A large discussion then took place within the Steering Committee. All members agreed that the new document was a very good product and well adapted to the target audience. Some members pointed out that such a document would be very useful for a larger audience, for example answering questions from the public after Fukushima. It was then proposed to modify the title to open it to the public. However the document was prepared within an international action plan on occupational radiological protection and all examples were prepared focused on workplaces, therefore the title should not be changed. It is then suggested to clearly indicate in the foreword that the document may be also very useful for other audience than workers.

Conclusions

The Steering Committee considers the new draft as adapted to the target audience and recommends that it could be useful for wider audience. This should be achieved without modifying the title.

The Steering Committee considers the new draft as nearly ready for entering in the publication process.

The Steering Committee requests for an additional paragraph dealing with pregnant workers.

The Steering Committee recommends to the Agency to translate the handbook into the five other official languages and to give permission to those bodies that are ready to translate it into other languages.

When this handbook will be issued, it should be put on ORPNET.

Steering Committee considers action 8 as completed.

Action 10: The IAEA, together with other co-sponsoring organizations, to engage with WHO in establishing the status of the draft Manual, and to encourage its finalization, publication and use as soon as possible.

Presentation

O. Holmberg reported activities under Action 10. He indicated that there had been a modification of the plan for this action. The first two volumes (General and Radiology) had been merged into a single volume dealing with general diagnostic radiology. It had been largely revised through IAEA consultancy, taking care of the new ICRP recommendations, the new BSS and UNSCEAR reports. It had been updated with regards to new terminology, new medical technologies, and new radiological protection technologies.

The drafts of the other three volumes (dentistry, nuclear medicine, radiotherapy) were totally out of date due to the evolution of the state of the art in the medical technology and radiological protection areas.

The proposal was to restrict action 10 to the issuance of the merged document: “Manual on Radiation Protection in Radiological Imaging in Hospitals” as a free-standing publication, to publish it in cooperation with WHO and ILO, as an IAEA Safety Report or at an equivalent level, and to discuss with WHO and ILO on how to deal with the other medical modalities outside the IAPORP as part of the on-going collaboration between organizations (including PAHO, the *Pan American Health Organization*).

Conclusions

The Steering Committee agrees with the new proposal to merge the first two volumes into a single manual on “Radiation Protection in Radiological Imaging in Hospitals.”

The Steering Committee considers the draft manual as updated and nearly good for entering into the publication process.

The Steering Committee agrees with the proposal to decide what new documents should be issued as a part of the regular programs of cooperation between the Agencies.

The Steering Committee recommends that all published documents should be put on ORPNET with links to the downloadable files.

Steering Committee considers action 10 as completed.

Action 12: The IAEA and ILO to collaborate in devising strategies for achieving a better understanding between radiation protection practitioners on one hand and occupational health and safety practitioners on the other and for developing coherent approaches to safety in the workplace.

Presentation

S. Niu explained the general context of the action 12, describing the basic principles set up in occupational safety and health by ILO. He briefed the Committee the 1984 ILO International Labour Conference resolution concerning the improvement of the working conditions and environment. He emphasised the fundamentals that should underpin a global occupational safety and health strategy, and the existence of many instruments on risks management in other industries and finally he presented the new terms of reference and the summary outline for this action that were endorsed last year by the Steering Committee. He requested advices and guidance for an implementation strategy and asked for elaborations of a road plan.

Discussion

M. Perez reminded about the objective for this action. She pointed out that there was still a divorce between the occupational safety and health community and the radiation protection community. Therefore there was a need for promoting a link between them. It could be helpful to focus on some good practices examples such as examples in radon, NORM, health sector, gammagraphy... J. Ma considered that Action 12 should also be very useful for communicating with the public. S. Niu confirmed that ILO was aware about the importance of cross fertilisation and was ready to organize a first secretariat meeting to move the action forward. R. Czarwinski supported that the ILO take the conceptual lead, and the IAEA provides inputs and support. P. Deboodt emphasized that the example of Action 14 is a good one and should be followed for this action. He pointed out that the leaderships for action 14 had been shifting from one organization to another and had shown a very successful story.

A general discussion concluded that decommissioning of plants should also be an area where it should be worthwhile to adopt such a global approach as it involves a large variety of risks during the decommissioning process.

T. Zodiates questioned if limiting the implementation of this action to the production of a single document is a good way. This was echoed by other members. Participants suggested other activities to implement this action, which include producing posters, setting up a specific session on holistic approach in international conferences with invited representatives of other industries. K. Kase suggested a forum, as a starter for the discussion, with ILO, WHO, IAEA at the IRPA Glasgow conference.

Conclusions

The Steering Committee reminds that the main objective of the action is to allow better cooperation between the occupational radiation protection community and the other occupational risks control communities. The aim is not to promote a single modality/approach but a coherent and integrated approach. In this context, the Steering Committee reiterates its endorsement at its last meeting to the new terms of reference, as well as to the summary outline for an Inter-Agencies (IAEA/ILO/WHO) Guidance Document on **“Developing a coherent approach to radiation and other risks factors at work place”**.

The Steering Committee recommends that the document should focus on situations such as decommissioning in NPPs, radiation protection in NORM industries and in medical sectors. The document should be firstly discussed at a meeting with representatives of these sectors.

The Steering Committee recommends that the International Organizations should consider other activities to implement this action. Such activities could include to making use of international congresses dealing with other risks for discussing and elaborating holistic approaches and to organizing special sessions on cross fertilisation by inviting specialists on other risks in international radiation protection congresses.

The Steering Committee takes note that ILO, who took the lead in preparation of a framework and a work plan for this document, is ready to jointly organize meetings with the IAEA and WHO. The Steering Committee urges the three organizations to make necessary allocation of resources to implement this action.

The Steering Committee considers action 12 as completed.

A.3. Closing the Action Plan

C. Lefaire stated that the IAPORP was set up by the IAEA in collaboration with the ILO based on the Geneva conference's findings and recommendations. He presented all types of products developed through these nine years of IAPORP implementation and concluded that the action plan has successfully reached its objectives.

For example, very good guidance and publications have been issued under Actions 3, 11, 13, 14; many training materials and awareness packages have been produced under Actions 6, 8, 9, 10, 11. The IAEA is supporting regional and worldwide ALARA networks and has set up a specific website (Action 7). Finally the international Agencies have largely homogenized their terminologies and integrated joint activities into regular activities (Actions 1 to 4).

Considering the actual situation, i.e. all 14 actions being considered as successfully completed, the Steering Committee suggested closing the IAPORP.

A.4. Proposals for the future

The IAEA, ILO and WHO introduced a session on future activities and suggested a sustainable mechanism to continue their collaboration. They confirmed their commitment to continuing and strengthening the inter-agency cooperation to prevent duplication of efforts. Whenever possible, joint publications and joint activities will be done.

The Steering Committee considered that many activities already started through the Action Plan, should be pursued into the regular activities of the Agencies (See Appendix 1 "Table of Conclusions" for each action). Furthermore, the Steering Committee has already discussed during its last meeting new topics of interest dealing with occupational exposure (see Fourth meeting minutes pages 13 and sq). For taking care of both, ongoing actions and new topics, there is still a need for continuing collaborating in the general area of occupational radiation protection. On this issue **the Steering Committee recommends the international Organizations to set up a mechanism (such as an advisory group) to facilitate a sustainable and effective collaboration in that area.**

The discussion also pointed out that the context has largely evolved and changed since the starting of IAPORP and even more since the first International Conference on Occupational Radiation Protection (Geneva 2002). In particular the Steering Committee noted that the context is significantly changed in view of the new ICRP recommendations (such as ICRP 103, new eyes dose limits,...), modifications of international regulations (such as the BSS), new technologies (in particular in the medical sector), increasing trend of itinerant workers, decommissioning of installations, implementation of radiological risk management in the NORM industries, and more recently feedback experience on occupational exposure in post accidental situations. **Therefore the Steering Committee recommended that the IAEA should convene the second International Conference on occupational radiation protection in 2014 in collaboration with other international Organizations.**

Appendix 1

IAPORP Table of actions status
17th June 2011

Action	Steering Committee (SC) conclusions	Action status
Action 1 To promote the ratification and implementation of ILO Convention 115	Totally integrated into regular activities	<i>Planned activities completed</i>
Action 2 To review the procedures for getting information from MS on the ILO Convention 115 implementation	Totally integrated into regular activities	<i>Planned activities completed</i>
Action 3 To develop guidance /information material (about requirements, inter-comparison of monitoring methods,)	<p>The material is developed and published . The inter comparisons on monitoring techniques and the promotion of ORPAS and SAT are continuing.</p> <p>Totally integrated into regular activities</p>	<i>Planned activities completed</i>
Action 4 Terminology used in ILO Code of Practice and means to addressing it	<p>The Steering Committee notes that ILO, IAEA and other agencies have focused on the joint publication of the BSS and therefore have avoided as much as possible individual publications on topics of common interest.</p> <p>Totally integrated into regular activities</p>	<i>Planned activities completed</i>
Action 5 To establish a database with contacts-points in the Agency MSs and information	<p>The Steering Committee notes that the database is now ready and will be made available on the ORPNET website as well as the terms of reference for the management of the database.</p> <p>The Steering Committee suggests that for avoiding legal problems that the database will be only accessible by international organisations and contacts persons in a secure part of ORPNET</p> <p>Totally integrated into regular activities</p>	<i>Planned activities completed</i>

<p>Action 6</p> <p>To develop publicity material/leaflets for the targeted groups of workers</p>	<p>The Steering Committee takes note that the seven posters are now available since May 2011 both on the ORPNET website and on CD and paper copies. It also notes that they are only available in English.</p> <p>The Steering Committee urges the IAEA to provide translation into the five other official languages of the Agency and to implement a very proactive advertisement policy</p>	<p><i>Planned activities completed</i></p>
<p>Action 7</p> <p>To provide a focal point for exchange of information through networking</p>	<p>The Steering Committee takes note of the ongoing support of the IAEA to the existing networks and of the close setting up of a new network in Latin America. He takes note of the absence of network in Africa, and West Asia.</p> <p>The Steering Committee recommends to the IAEA to continue supporting financially in the coming years the existing regional networks and to facilitate the setting up of new networks where there is no.</p> <p>The Steering Committee appreciates and supports the initiative of the IAEA dealing with ISEMIR. The Steering Committee notes that the two working groups results have already provided interesting information and working plans.</p> <p>The Steering Committee ask the IAEA to provide adequate resources for the development and maintenance of the database and for running ISEMIR after the test period on a three years review period</p> <p>The Steering Committee supports the initiative for a coordination of the networks if needed</p> <p>The Steering Committee takes note of the launching of ORPNET last September. It also takes note of the management system and procedures put in place at the IAEA. The Steering Committee suggests to giving a room for suggestions and information provision from the users on the home page. The Steering Committee already appreciates the contents and functions of ORPNET that should aim to be managed and populated in the same way as RPoP</p> <p>The Steering Committee recommends to IAEA to give direct access to ORPNET through a specific address</p>	<p><i>Planned activities completed</i></p>

<p>Action 8</p> <p>To prepare and disseminate information material to the workers representatives</p>	<p>The Steering Committee considers the new draft as adapted to the target audience and recommends that it could be useful for a wider audience. This should be achieved without modifying the title.</p> <p>The Steering Committee considers the new draft as nearly ready for entering in the publication process.</p> <p>The Steering Committee requests for an additional paragraph dealing with pregnant workers.</p> <p>The Steering Committee recommends to the Agency to translate the handbook into the five other official languages and to give permission to those bodies that are ready to translate it into other languages.</p> <p>When these handbooks will be issued, they should be made available on ORPNET</p> <p>Steering Committee considers action 8 as completed</p>	<p><i>Planned activities completed</i></p>
<p>Action 9</p> <p>Postgraduate education for/with professional medical bodies</p>	<p>The Steering Committee takes note that regular activities are on-going and that many new training material have been issued or translated into different languages and disseminated through many channels.</p>	<p><i>Planned activities completed</i></p>

<p>Action 10</p> <p>Draft Manual on RP in Hospitals and in General Practice: status and publication</p>	<p>The Steering Committee agrees with the new proposal from the IAEA/WHO to merge the first two volumes into a single manual “on radiation protection in radiological imaging in hospitals.”</p> <p>The Steering Committee considers the draft manual as updated and nearly good for entering into the publication process.</p> <p>The Steering Committee agrees with the proposal of IAEA/ WHO to decide what new documents should be issued as a part of the regular programs of cooperation between the Agencies</p> <p>The Steering Committee recommends that all published documents should be presented and populated on ORPNET with links to the downloadable files</p> <p>The Steering Committee considers action 10 as completed</p>	<p><i>Planned activities completed</i></p>
<p>Action 11</p> <p>Activities involving exposure to natural radiation</p>	<p>The Steering Committee takes note that a third industry specific safety report on Rare Earth Industries will be published within 4 months while the final draft of the Phosphate Industry report will be available in August 2011 and will then go to the Publication Committee, and while the Titanium Dioxyde Industry report has still to be completed.</p> <p>The Steering Committee takes note that some new training materials have been published in 2010.</p> <p>The Steering Committee recommends that all published documents should be presented and populated on ORPNET with links to the downloadable files</p>	<p><i>Planned Activities completed</i></p>

<p>Action 12 Holistic approach of ORP</p>	<p>The Steering Committee reminds that the main objective of the action is to allow better cooperation between occupational radiation protection community and other occupational risks control communities. The aim is not to promote a single modality/approach but a coherent and integrated approach. In this context, the Steering Committee endorsed at its last meeting the new terms of reference, as well as the summary outline for an Inter-Agencies (IAEA/ILO/WHO) Guidance Document on “Developing a coherent approach to radiation and other risks factors at work place”.</p> <p>The Steering Committee recommends that document should focus situations such as decommissioning in NPPs, radiation protection in NORM industries and in medical sectors. The document should be firstly discussed by a meeting with representatives of these sectors.</p> <p>The Steering Committee recommends that the International Organisations should consider other activities to implement this action. Such activities could include to making use of international congresses dealing with other risks for discussing and elaborating holistic approaches and to organizing special sessions on cross fertilisation by inviting specialists on other risks in international radiation protection congresses, ...</p> <p>The Steering Committee takes note that ILO, who took the lead in preparation of a framework and a work plan for this document, is ready to jointly organise meetings with the IAEA and WHO and urges the 3 organisations to make necessary allocation of resources to implement this action.</p> <p>The Steering Committee considers action 12 as completed</p>	<p><i>Planned activities completed</i></p>
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<p>Action 13</p> <p>Protection of pregnant workers and foetus</p>	<p>The Steering Committee takes note that the situation has not evolved since its last meeting and the document is ready for publication, with the exception of one Annex.</p> <p>The Steering Committee urges IAEA to go ahead in the publication process without waiting for the ICRP to provide new conversion factors.</p> <p>The Steering Committee advice to publish this Safety Report on the ORPNET site ASAP</p>	<p><i>Planned Activity completed</i></p>
<p>Action 14</p> <p>Probability of causation of detrimental effects due to occupational exposure to ionizing radiation</p>	<p>The Steering Committee takes note with satisfaction of a very successful inter-agencies' cooperation on this action and is very pleased to note that the document was published by the ILO, on behalf of the 3 collaborating organizations, published the document in 2010.</p> <p>The Steering Committee asks for this publication to be introduced immediately on the ORPNET site with a link to the downloadable file on the ILO website.</p>	<p><i>Planned activities completed</i></p>

Appendix 2:

**5th Meeting of the Steering Committee for the
Action Plan for Occupational Radiation Protection
15-17 June 2011
M-Building, Press Room
Final Agenda:**

<i>Wednesday, 15 June 2011</i>		
10:00 - 10:30	Registration	
10:30 - 10:45	Welcome address (IAEA – ILO)	R. Czarwinski Shengli Niu
10:45 - 11:00	Administrative issues	IAEA Secretariat
11:00- 11:30	Introduction of the participants and chairperson Approval of meeting agenda Approval of the report of the 4 th SC meeting 2010	
11:30 - 12:15	SESSION 1: Status of the follow up activities for Actions 1-4, 5, 6, 7, 9,11, 13, 14	
	Action 1-4: presentation on follow-up activities	Shengli Niu (20 min)
	Action 5: Contact points with ILO, WHO, IAEA: proposal to post it on ORPNET	R. Cruz Suarez (10 min)
	Discussion	
<i>12:15 - 13:45</i>	<i>Lunch break</i>	
13:45 - 15:00	SESSION 1 (continued)	
	Action 6: Development of publicity material for the targeted groups of workers: The posters	A. Luciani (15 min)
	Action 7: Network situation with already existing networks (ISOE, EAN, ARAN, RECAN); recent activities Information System on Occupational Exposure in Medicine, Industry and Research - ISEMIR ORPNET and its Management	Jizeng Ma (15 min) John Le Heron (25 min) C. Lefaure/J.Ma (15 min)
	Discussion	

15:00 - 15:30	<i>Coffee Break</i>	
15:30 - 17:45	Action 11: NORM; status of the draft Safety Reports on Phosphate and Rare Earths	P.P. Haridasan (20 min)
	Action 13: Pregnant workers; presentation of the Safety Report	R. Cruz-Suarez (10 min)
	Action 14: Probability of causation; status of publication and guidance material and plans for dissemination	Shengli Niu (10 min)
	Discussion	
18:00	<i>Social Event at the VIC Restaurant</i>	

<u>Thursday, 16 June 2011</u>		
09:00 - 10:30	SESSION 2: Status of actions in progress	
	Update on Action 9 and Action 10	M. Perez/WHO and O. Holmberg/IAEA
	Action 8: Material for workers representatives	P.P. Haridasan (30 min)
	Action 12: Holistic approach	Shengli Niu (30 min)
	Discussion	
10:30 – 11:00	<i>Coffee Break</i>	
11:00 - 12:00	Presentation and first discussion of the updated Table of results and recommendations	
12:00 – 12:30	SESSION 3: Progress and current status of occupational radiation protection	
	DPP of Safety Guide on Occupational radiation protection	P.P. Haridasan (20 min)
12:30 - 14:00	<i>Lunch Break</i>	
14:00 – 15:30	SESSION 3 (continued)	
	Current activities on occupational radiation protection in IAEA	J. Ma (30 min)
	IAEA education and training activities in Radiation, Transport and Waste Safety	A Luciani (15 min)

	UNSCEAR - Data collection on occupational exposure	F. Shannoun (15 min)
	Recent NEA activities in the field of Occupational Radiation Protection	H. OKYAR NEA/OECD (20 min)
	Occupational Radiation Protection – Activities of the European Commission	S. Mundigl EC (20 min)
15:30-16:00	<i>Coffee Break</i>	
16:00 – 17.30	SESSION 4: The way forward	
	Introduction by IAEA, ILO, WHO	
	Round table input from all participants	(30 min)
	Discussion (working meeting with ILO, Chair, Rapporteur)	

<u>Friday, 17 June 2011</u>		
09:00 – 10:00	SESSION 5: Fukushima related activities	
	IAEA Actions related to Fukushima	R. Cruz-Suarez (20 min)
	Fukushima related activities-UNSCEAR	M. Crick UNSCEAR (20 min)
	Discussion	
10:00 – 10:20	<i>Coffee Break</i>	
10:00 – 12:00	SESSION 6: Proposal for the future	
	Overview of past activities	C. Lefaure (30 min)
	Proposal from IAEA and ILO	
	Discussion	
12:00	Closure of the meeting	Pil-Soo Hahn DIR-NSRW

Appendix 3:**NOTIFICATION OF AN AGENCY MEETING**

Department of: Nuclear Safety and Security
Division / Section of: NSRW - Radiation Safety and Monitoring Section

Issue No 2
Date: 2011-06-16
 14:23:45
 J1-TM-40988

Title of meeting:	Steering Committee for international action plan on occupational radiation protection							
Begin Date:	2011-06-15	End Date:	2011-06-17	Meeting Room:	VIC PR	Ext.:	Convening Time:	10:30
Scientific Secretary	Room No.	Ext.	Secretary	Room No.	Ext.	Conference Clerk		
Ma, Jizeng	B0708	26173	Pucher, Ingeborg	B0707	22717	Philippe Katra		

COUNTRY / ORGANIZATION	PARTICIPANT		OFFICIAL MAILING ADDRESS	ADDRESS DURING MEETING (Hotel)	DATES	REMARKS
	Title	Last Name First Name, Middle Name Initials				
Argentina	Mr	Massera Gustavo, Enrique			2011-06-14 2011-06-17	
Belgium	Mr	Deboodt Pascal			2011-06-15 2011-06-17	

Brazil	Mr	Matta Luiz, Ernesto			2011-06-15 2011-06-17	
France	Mr	Lefaure Christian			2011-06-14 2011-06-17	
France	Ms	Perrin Marie-Line			2011-06-15 2011-06-17	
Syrian Arab Republic	Mr	Kharita Mohammad Hassan			2011-06-15 2011-06-17	
United Kingdom	Mr	Tattersall Philip, John			2011-06-15 2011-06-17	
United States of America	Ms	Lewis Doris			2011-06-14 2011-06-17	
European Commission	Mr	Mundigl Stefan			2011-06-14 2011-06-16	
International Labour Organization	Mr	Niu Shengli			2011-06-15 2011-06-17	
International Radiation Protection Association	Mr	Kase Kenneth, Raymond			2011-06-15 2011-06-17	
International Society of Radiology	Mr	Martin Colin			2011-06-15 2011-06-17	

International Trade Union Confederation	Mr	Zodiatas Tasos			2011-06-15 2011-06-17	
Nuclear Energy Agency of the Org. for Economic Co-operation and Development	Mr	Okyar Halil Burcin			2011-06-14 2011-06-17	
UNSCEAR	Mr	Crick Malcolm			2011-06-14 2011-06-17	
UNSCEAR	Mr	Shannoun Ferid			2011-06-15 2011-06-17	
World Health Organization	Ms	Perez Maria del Rosario			2011-06-16 2011-06-17	

IAEA Staff

Mr Cruz Suarez, Rodolfo NSRW

Ms Czarwinski, Renate SH-RSM/NSRW

Mr Hahn, Pil Soo DIR-NSRW

Mr Holmberg, Per-Ola NSRW

Mr Le Heron, John Campbell NSRW

Mr Luciani, Andrea NSRW

Mr Mundiyanickal, Abraham NSRW

Mr Pappinisseri Puthanveedu, Haridasan NSRW

Appendix 4:

Report on the Fourth Meeting of the Steering Committee for the International Action Plan for Occupational Radiation Protection (IAPORP)

**15 - 17 February 2010
TM-29071
IAEA Headquarters, Vienna**

Background

The first International Conference on Occupational Radiation Protection was held in Geneva from 26 to 30 August 2002. It was organized by the IAEA, which convened the Conference jointly with the International Labour Office (ILO). It was co-sponsored by the European Commission (EC) and held in cooperation with the World Health Organization (WHO) and OECD Nuclear Energy Agency (NEA) and a number of other international organizations. The Conference produced a number of important findings and recommendations. These were considered in September 2002 by the IAEA General Conference, which requested the IAEA's Director General, in cooperation with the ILO and other relevant bodies, to formulate and implement an action plan.

The IAEA and ILO prepared a draft that was reviewed by the organizations and key participants involved in the Geneva Conference as well as by the International Confederation of Free Trade Unions (ICFTU) and the International Organisation of Employers (IOE). The Action Plan was approved by the IAEA Board of Governors on 8 September 2003. In order to ensure the successful implementation of the Action Plan, the IAEA and ILO agreed to establish a Steering Committee (SC) with the overall remit to advise on, monitor and assist in the practical implementation of the International Action Plan (IAP). The First, Second and Third Meetings of the Steering Committee were held in Vienna on 4-6 February 2004, 25-27 January 2006, and 28 – 30 January 2008 respectively.

Summary

The Fourth Meeting of the Steering Committee was held in Vienna, 15 - 17 February 2010. 18 participants attended the meeting (see Appendix 1). The first one and half days consisted of oral presentations, by ILO, and IAEA representatives, on the status of each action in progress or completed but with follow up actions of the IAP as well as two presentations by IAEA on the present status of the International BSS and on Radon risk management policy as stated in the latest ICRP documents and in the revised International BSS; another presentation was made by UNSCEAR. Time was allowed for discussions on each Action. At the end of that first part the planned activities of eleven actions, namely Actions 1, 2, 3, 4, 5, 6, 7, 9, 11, 13, 14 were considered as completed and their follow up activities were to be integrated into the regular activities of the Agencies. Three actions, namely Actions 8, 10, 12 were considered as still in progress. With this in mind, the Steering Committee decided that the Action Plan should continue for another 18 months to permit the planned activities of the pending actions to be completed. The Steering Committee conclusions and recommendations for each action are summarised in the minutes in Appendix 2. The meeting provided to the participants an opportunity - to discussing new issues of interest within the occupational radiological protection area and – to providing the IAEA with recommendations on future activities considered as important for providing adequate answers to the new challenges. The issues and recommendations are summarised in the minutes in Appendix 3.

1 Report

A.5. Welcome address

R. Czarwinski welcomed the participants on behalf of the IAEA, and stressed that the meeting was an opportunity for evaluating the Action Plan as a whole, discussing its future as well as new possible activities.

S. Niu presented his wishes for a very constructive and fruitful discussion on behalf of the ILO. He also gave some information about regular activities dealing with actions already closed during the last Steering Committee meeting in 2008. He also thanked the Agency for its cooperation and commitment with regards to the Action Plan.

R. Czarwinski introduced R. Cruz Suarez as the Scientific Officer, M. Perrin as the chair for the meeting and C. Lefaire as the Rapporteur.

A.5.1. Approval of the meeting agenda

The draft agenda presented by R. Cruz Suarez was approved without any modification (see Appendix 4).

A.5.2. Approval of the report of the 3rd meeting

No new comments were provided. The report has therefore been approved (see Appendix 5).

A.6. Status of each action

As actions 1, 2, 4 and 9 were considered as closed since the last Steering Committee meeting, they did not give rise to any discussion. For these actions one can refer to the previous Steering Committee meeting minutes (see Appendix 5)

The discussion was then split between two sets of actions, those which were considered at the last Steering Committee meeting as completed but with follow up actions and those that were considered then as still in progress

A.2.1 Actions considered as completed in 2008 but with follow up actions

These actions are namely actions 3, 5, 6, 13, 14

Action 3: The IAEA and ILO to continue to cooperate in the development of guidance and information material that will assist in the interpretation of requirements set out in conventions and standards, and in the conduct of further IAEA intercomparison of monitoring methods for assessing occupational exposure

Presentation

S. Niu reported to the Steering Committee that the ILO note “General observation concerning Convention 115” will be updated following the revised BSS publication (to the preparation of which ILO contributes actively) and he presented a very recent ILO note on “Role and activities of ILO

concerning the radiation protection of workers". These two notes provide ILO up to date guidance on the interpretation of requirements set out in conventions and standards.

R. Cruz Suarez, reported that IAEA, following that objective, has continued the development and implementation of the Occupational Radiological Protection Appraisal Services (ORPAS) missions and more recently the Self Assessment Tool (SAT). He reported some lessons learned and results in requirement implementation improvements. He also reported the last intercomparisons performed in Europe, Asia, Latin America and Africa. All results will be presented at IM2010 European Congress on Individual Monitoring

Conclusions

After a short discussion, the Steering Committee noted that the two ILO notes and all actions from IAEA to pursue ORPAS, as well as benchmarking exercise and providing stakeholders with Self Assessment Tool, are now part of regular activities of the Agencies.

The Steering Committee considered Action 3 as fully completed.

Action 5: ILO to make the list of contact points in its Member States and field structure available to the IAEA, which should inform the contact points about the latest available standards, guidance and advice developed at the international level and invite their representatives to relevant workshops, seminars and conferences.

Presentation

R. Cruz Suarez reported that IAEA has asked ILO and WHO for updating their contact points in the database. He pointed out that what is important is to have, in addition to Agencies representatives, the actual counterparts in countries. He informed the Steering Committee that the database will be made available to all through the NORP website and that IAEA will make further use of that for regularly informing these contact points of all regional activities and for inviting them to relevant workshops, seminars and conferences.

S Niu reported to the Steering Committee that, the ILO have provided links with its website where lists of ILO representatives and national contact points are available and regularly updated.

Shannon reported that, as WHO has a lot of contacts in each country, it is needed to find the good counterpart representatives.

UNSCEAR expressed interest on the use of that data base for collecting occupational data

Discussion

A short discussion, dealt with the use of that data-base and its completion that should be very pragmatic and easy to be updated. The Steering Committee requested then that Terms of Reference for these should be written by the Agencies.

Conclusions

The Steering Committee noted that its 2008 comments and recommendations are still valid. It was confirmed that this action is now an inter agencies cooperation work. The Steering Committee noted that the database will be made available on the NORP website as well as the terms of reference for the management of the database.

Action 6: The IAEA, in consultation with ILO, to develop publicity materials in the form of posters and leaflets that target groups of workers identified as likely to benefit directly from the information provided — for example, workplace material designed to reduce the number of near misses and the risk of serious accidents

Presentation

A Luciani reported to the Steering Committee that, as requested, comments on the posters were received from both WHO and IAEA/NSRW staff, which have been taken into account in the updated version that has been distributed to the Steering Committee members. He reported too, that IAEA is now ready for asking for endorsement by stakeholders such as trade unions and then providing them in a leaflet or brochure form and making the material available as pdf in the six official languages.

Discussion

Steering Committee members congratulated again IAEA for preparing such good material. As a few remarks were still provided, it was decided to take into account those remarks from the Steering Committee members that will be given to A Luciani before the end of the meeting; as a representative of ICTU, he will provide the endorsement from trade unions. The Steering Committee agreed unanimously that such material should be made available also on the new NORP website. The Steering Committee requested IAEA to provide next March a timetable for the remaining follow up actions and publication and translation processes that should start immediately.

Conclusion

The Steering Committee took note that, after a review process, new posters are now ready. It noted that they will be made available on NORP website, first in English and then in the other languages and then largely distributed following previous recommendations.

Action 13: The IAEA to review current information on the issue of standards for the protection of pregnant workers and their embryos and foetuses in order to determine whether the issue warrants action at the international level. In addition to the work described in the presentations made at the Geneva Conference, relevant work has been done in a number of countries and by a number of bodies (such as ICRP)

Presentation

R. Cruz Suarez reported that since the last meeting the document has been finalised but for one Annex on internal doses. He specified that it should be finished before summer and published during 2010. He also specified that last time the publication was supposed to be a TECDOC, but in between the RASSC Committee has agreed on the outline of proposed contents and therefore the Publication will be a Safety Report.

Discussion

A short discussion allowed the IAEA to precise that after the publication of the revised BSS, that Safety Report will be included into a Safety Guide, which is an higher level publication.

Conclusions

The Steering Committee took note that the document is ready for publication, with the exception of one Annex. The Steering Committee took note that the document will first be issued as a Safety Report. The Steering Committee considered Action 13 as completed.

Action 14: The IAEA, in collaboration with ILO, WHO, NEA and other relevant bodies and drawing on the experience of other stakeholders, to continue its work on developing international guidance for aiding decision-making on the attribution of cases of detrimental health effects to occupational exposure to ionizing radiation.

Presentation

S.Niu reported to the Steering Committee that the document jointly prepared and successively led by IAEA, WHO and ILO, is now finalised, and is in the hands on ILO Publication Department. Therefore it will be made available in the next few months, first as a hard copy and later on a CD.

Discussion

During a short discussion the Steering Committee members congratulated the three Agencies for such a successful cooperation, they also requested to receive the document when available, which has been then promised by ILO. The Steering Committee recommended then to the Agencies to track any feedback on the document and to keep into consideration all evolutions of scientific background as well as of compensation schemes. If needed this should lead to updating in the future the document.

Conclusions

The Steering Committee took note of a very successful inter-agencies' cooperation and noted that the document is ready for printing at ILO and will now be very soon published.

With that the Action 14 is considered as completed,

So the five actions considered as completed in 2008 but with follow up actions namely actions 3, 5, 6, 13, 14 were now considered by the Steering Committee as totally implemented; while their continuation was considered as belonging to the Agencies Regular Activity.

A.2.1 Actions considered as still in progress in 2008

These actions are namely actions 7 , 8, 10, 11, 12

Action 7: The IAEA to provide a focal point, on a website, where networks may be established for exchanges of information, experience and lessons learned between interested parties

Presentation

P. Deboodt presented the policy implemented by the Agency for supporting the development of networks. P. Deboodt reminded the participants that the IAEA is an observer in the European ALARA Network (EAN), acts jointly with the NEA as Secretariat of the ISOE network for NPPs and, furthermore, functions as an ISOE Technical Centre for 11 non-OECD countries; he also mentioned the IAEA participation to the Expert Group on Occupational Exposure (EGOE) from the NEA secretariat. He also informed the Steering Committee that IAEA has continued to support, through its Technical Cooperation and Regional Projects, the two regional networks set up by the Agency: the Regional East European And Central Asian Countries (RECAN) which has already organised five workshops, and the Asian Region ALARA Network, which had which has already organised two workshops. P. Deboodt pointed out the increasing added value from these networks.

C. Lefaire reported to the Steering Committee an initiative from the IAEA to set up the International System on occupational exposure in Medicine, Industry and Research (ISEMIR) which has been launched in January 2009 and has led to the setting of two Groups one on Interventional Cardiology (WGIC) since one year, and more recently one on Industrial radiography (WGIR).

He then reported the recent development of the NORP website as “focal point for the networking in occupational radiological protection”. A. Mundiyanickl made then a demonstration of the beta version of that website, which is nearly ready for being open to the public.

Discussion

A large discussion took place on these three items. The Steering Committee remained in favour of further supporting the existing networks and setting up new networks in Africa, Latin America and Middle East. As well the Steering Committee supported the initiative from the Agency to launch ISEMIR for a three years test period and for having selected the pre presented two topics for the first Working Groups. Finally the Steering Committee members considered that NORP was the expected answer but they required 2 more weeks for accessing to the NORP website, answer all questions raised during the presentation and make their comments and suggestions.

Conclusions

The Steering Committee took note of the ongoing support of the IAEA to the existing networks and of the absence of such regional networks in Latin America, in Africa and in the Middle East.

The Steering Committee recommended to the IAEA to continue supporting financially in the coming years the existing regional networks and to facilitate the setting up of new networks where there is no.

The Steering Committee appreciates and supports the initiative of the IAEA dealing with ISEMIR.

The Steering Committee considers the developed website as being the adequate answer to action 7 specific request.

The Steering Committee considers action 7 as completed.

Action 8: The IAEA, in consultation with ILO and drawing on the experience of trade unions and other stakeholder organizations, to prepare and disseminate suitable information materials to workers' representatives and labour educators in order to promote a better informed workforce and better understanding generally among those concerned with exposure to radiation

Presentation

A. Luciani reported on the status of action 8, whose objectives are to enable workers representatives to understand the basis and main procedures of radiological protection in order to answer to the “very first” questions from the workers when faced with ionising radiation. He presented the new draft of the document, but he pointed out that most activities dealing with Action 8 have been postponed. He proposed then a new planning for these activities.

Discussion

The discussion within the Steering Committee re-emphasised the objectives and target audience of that document, as stated during last meeting (see minutes of last meeting). In order not to re start the process it was agreed that the secretariat will issue very quickly a two pages document reminding the goals and target audience and that within six months the IAEA will produce a new draft document that will be ready for circulation among the Steering Committee members and the Trade Union end users. At the beginning of 2011 the document should start its publication process.

Conclusions

The Steering Committee noted that it has not been possible to follow the previous planning. The Steering committees noted that a new planning is now proposed. The Steering Committee expected a report on the fulfilment of that action by the end of 2010.

The Steering Committee considered Action 8 as still in Progress.

Action 10: The IAEA, together with other co-sponsoring organizations, to engage with WHO in establishing the status of the draft Manual, and to encourage its finalization, publication and use as soon as possible.

Presentation

O. Holmberg reported Action 10 situation: the first two volumes (General and Radiology) are quite well advanced, while the three others (dentistry, nuclear medicine, radiotherapy) still require much more work to varying degrees. All volumes need to incorporate new ICRP recommendations and BSS revision as well as for taking care of the important evolution in terms of medical technologies.

Discussion

WHO and ILO committed themselves to review with IAEA the first two documents, also with regards to the revised BSS before the end of the year. It was also pointed out in the discussion that all the ongoing volumes need to be reviewed from a medical viewpoint. The Steering Committee members asked for a plan for the three other documents to be then prepared and proposed to them.

Conclusions

The Steering Committee noted that the first two manuals are very advanced but need to be reviewed in view of new ICRP recommendations and the revised BSS.

The Steering Committee noted that the three others need a more thorough revision following both new BSS publication as well as important evolutions of medical technologies.

The Steering Committee expected to receive a plan for completion of the work by the end of May 2010 and a progress report by the end of 2010

The Steering Committee considered Action 10 as still in Progress.

Action 11: *In support of its programme on exposure to natural radiation, the IAEA to assist authorities in identifying activities involving exposure to natural radiation that may need to be controlled, and to generate and disseminate additional sector-specific information on radioactivity levels, exposure conditions, and chemical and physical characteristics of airborne pollutants in workplaces involving naturally occurring radioactive material.*

Presentation

D. Wymer presented the activities implemented by the Agency within the scope of Action 11 during the last two years. Within the five industry-specific documents planned, the three remaining ones (Phosphate industry, Titanium dioxide industry and production of rare earths from thorium-containing minerals) will be completed mid 2010. He also presented some new training material: one generic training package for NORM and the corresponding Training Manual that will be completed by mid-2010 ; as well for oil and gas a training package is completed and the training manual has already been published.

Discussion.

A short discussion raises the point of preparing a new document on “ high level natural radiation areas”. That proposal was not followed by the Steering Committee.

Conclusions

The Steering Committee took note that the drafting of the last three industry specific reports on Phosphate Industry, Rare Earth Industries and Titanium Dioxide Industry will be completed mid 2010.

The Steering Committee took note that some new training material will be available by mid 2010.

The Steering Committee considered that Action 11 was completed

Action 12: *The IAEA and ILO to collaborate in devising strategies for achieving a better understanding between radiation protection practitioners on one hand and occupational health and safety practitioners on the other and for developing coherent approaches to safety in the workplace.*

Presentation

C. Lefaire reported that during the last Steering Committee meeting, after a long discussion on the objectives of the action, the setting up of experts meetings on the subject was agreed on with some modifications requested to the proposed terms of reference. Therefore a two days meeting of the ILO/IAEA was organised in Geneva, which has led to proposed as a target the publication of a guidance document addressed both to the health physicists and their counterparts in other occupational risks as well as managers, workers and regulatory bodies. This document should aim at proposing practical recommendations and guidance for an holistic approach which will allow to avoid conflicts and reinforce coherence, complementarities and synergies between different risks management

approaches. The examples to be selected should concern sectors where radiological is at stake and can compete with other occupational risks. C. Lefaure presented then the new draft for the terms of reference as well as the outline for the five chapters of the document.

Discussion

A long discussion took place on that subject during the second day. During that discussion many warnings were reminded (to be as practical as possible, to address not only the health physicists and their counterparts but also managers, regulatory bodies, not to enlarge too much the scope to sectors without radiological risk,...). The Steering Committee recognised that these were effectively taken into account in the new version of the Terms of Reference.

The discussion led also to modify these terms of reference in avoiding to speaking about “holistic approach”, which was difficult to be understood by many. The wording “coherent approaches” was preferred after a long discussion against “integrated approach”, “balanced approach” ...

Therefore the proposed title of the document “**Developing coherent approach to radiation and other risks factors at work place**” was kept.

The setting of working groups was also clarified, as it appeared that different experts should be invited to prepare the different chapters and the may be several groups will be needed, with the co secretariat providing a coordination. Therefore in the terms of reference the wordings “experts meetings” or “experts” replaced working group. With that the new terms of reference (see Appendix 6) were endorsed as well as the outline for the document (see Appendix 7)

It was clear for the Steering Committee members that at this stage, flexibility was requested, and that the exact organisation and contents will be more precise after the first experts meetings.

The question was then raised of the leadership and resources. ILO confirmed he agreed to take the leadership of that action if adequate resources are provided by the other two Agencies. The Steering Committee reminded that Action 12 has been proposed following the Geneva Conference on Occupational Radiation Protection and agreed on by IAEA General Conference within an Action Plan dealing with radiological protection of workers. The Steering Committee reminded also that the it is composed of radiological protection specialists. It was also emphasised that ILO and WHO have to cope with hundred of different risks, while IAEA deals only with the radiological one, which has always been isolated. Therefore the expectations are higher from the radiological protection side and the resources from IAEA are of utmost importance. The Steering Committee urged then the three organisations to provide adequate resources according to the importance of the topic in their domain as previously discussed.

The Steering Committee requested the Agencies to develop during the next two months a plan for the completion of that action.

Conclusions

The Steering Committee endorsed the new terms of reference with a few modifications, as well as the summary outline for an Inter-Agencies (IAEA/ILO/WHO) Guidance Document on “**Developing coherent approach to radiation and other risks factors at work place**”.

The Steering Committee took note that ILO will coordinate this action, and urges the 3 organisations to make adequate resources available.

The Steering Committee expected to receive a plan for completion of the work by the end of May 2010 and a progress report by the end of 2010

So within the five actions considered as in progress in 2008 two namely actions 7 and 11 were now considered by the Steering Committee as totally implemented; while their continuation was considered as belonging to the Agencies Regular Activity. The other three, namely actions 8, 10 and 12 were considered as still in progress.

A.7. Future of the Action Plan

Considering the actual situation, i.e. 11 actions being considered as totally performed and 3 still in progress, the co secretariat declared that it was not possible to close the Action Plan (all action status and future plans are summarised in Appendix 6). Therefore the Steering Committee will remain active up to the closure of the IAPORP, and one more year or 18 months are envisaged for completing the three actions.

A.8. Recommendations on future concerns

R Czarwinski requested then from the Steering Committee members what they considered as issues of interest for occupational radiological protection in the future and to providing the IAEA and ILO with recommendations dealing with these issues.

P Deboodt introduced the discussion reminding that a questionnaire was made available to every Steering Committee member, and that Brasil has answered to that questionnaire.

A wide discussion during half of the second afternoon, lead to between 10 to 15 issues dealing with new technologies in the medical sector, exposure to radon, optimisation in different places, workers during a “transition phase between emergency and existing situations, dose passport, and dosimetric issues. A table with groups of the previous mentioned issues was discussed the next morning and led to recommendations for each issue as well to some modifications on the issues themselves.

The first group of issues dealt with new technologies in the medical area, and is composed of four topics: the interventional procedures, the PET CT, the Beta emitter therapy and the use of new radiopharmaceutical (mainly with alpha emitters). There was a consensus in the Steering Committee for considering that the occupational stakes in that group were often new and essential and needing further proposals and actions from the Agency, either enhancing its activities, promoting new radiological protection assessment and proper implementation of radiation protection programme, as well as dosimetric improvements for eyes lens and extremities.

Issues of interest	Recommendations
1/ New technologies in the medical area	
1.1 Interventional procedures in radiology, cardiology and other specialities...	To facilitate development and use of ad hoc monitoring for the eyes lens and extremities To enhance internal Agency coordination for these activities
1.2 PET CT	To enhance internal Agency coordination for these activities To reinforce implementation of radiation protection programme
1.3 Beta emitter Therapy	To find actions and strategy on how to expand extremity monitoring coverage and improve implementation of radiation protection programme
1.4 Use of new Radiopharmaceuticals (alpha emitters)	To promote the implementation of assessment programmes for workers exposures

	To promote design modification procedures for the work places not designed for alpha emitters
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The occupational exposure to radon gave rise to some discussions, in particular on the way the revised BSS requirements should be interpreted in particular when 6mSv shall be exceeded. Therefore it was requested from the Agency to enhance its activities in the domain and to prepare guidelines for individual dose assessment to be included in the future Safety Guide that is planned after the issuance of the revised BSS.

It was also pointed out by several participants that in the NORM industries the implementation of the ALARA principle was not so obvious for many reasons (different safety cultures, many other risks to be managed, ...) and that this was reinforced when the NORM industries were located in developing countries. In these countries the ORPAS findings also showed that the implementation of ALARA in other domain (mines for example) is not trivial. Therefore the support to ALARA Networks was again recommended in that domain. As well the safety report on optimisation should be upgraded to take into account these aspects. This also led the Steering Committee to put new emphasise on the Action 12 of the IAPORP as being part of the answer to these issues.

A large discussion took then place on the “transition” between emergency and existing situation. A so called “transition phase” does not exist as a concept neither for the ICRP recommendation, nor in the revised BSS, and the two “emergency” and “existing” situations are well described with their implications for the workers radiological protection. However in practice one cannot say that the change from one situation to the next will occur in a “second” therefore some guidance will be needed. It was then recommended by the Steering Committee to check all what is being done by the other international organisations and other departments at IAEA, and if needed to organise a workshop and the to publish a guidance.

Another discussion started with the elaboration of a dose passport for facilitating the radiological protection of workers crossing borders in Europe. It was first envisaged to discuss the possibility of expanding such a passport around the world. But quickly it appeared not so worthwhile due to very different situations between nuclear countries and others. Nevertheless the follow up of itinerant workers appears to be a worldwide problem and information has to be provided by the Agency, in cooperation with ILO (to take care of potential bad impact of such information on employment), on the good ways to be informed on individual dose and on the potential addressees of that information.

The previous discussion also raised the point of national dose registry as it is partially connected. Therefore, collaborating with UNSCEAR and ESOREX for unifying data collection format and contents was recommended as well promotion of RAIS through TC projects and a better definition of what has to be included in the dose from natural sources.

Finally several topics dealing with the evolution of dosimetry were raised, some being directly connected with previous issues (medical in particular). A specific mention was given to the characterisation of workplaces (in particular in complex situations such as accelerators) and the promotion of the role of TSO was requested.

7. Dosimetric issues	As appropriate: - To monitor all technical developments - To liaise with ISO, IEC, ICRU and ICRP - To consider all the following topics - lens of eyes and extremities dosimetry;
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	- criticality accident; - dose reconstruction methodology in all Safety Documents to be published
7.1 Characterisation of workplace (incl complex such as accelerators)	Promoting TSO participation in different practices

At the end of the discussion the problem of the new countries developing nuclear facilities was raised. It appeared therefore that the impact in terms of occupational radiological protection was not taken into account in most cases and then that the support of radiological protection was needed in many areas (technical and cultural). Therefore it was recommended to NSRW to check Departments and other Agencies initiatives and prepare as appropriate proposals for actions. All issues and recommendations are summarised in Appendix 7

A.9. Conclusions for the Action Plan

Before the end of 2010, it is expected that planned activities for all three actions still in progress will be enough advanced to envisaged closing the Action Plan either at that time or a few months later.

If a new Steering Committee meeting is needed it will occur in mid 2011, and will then also review the proposals of the Agency dealing with the issues of interest and its own recommendations for these topics. Otherwise the Action Plan will be closed following email exchanges between the co secretariat and the Steering Committee members.

The Agency envisages to set up an Advisory for the follow-up and advices of/for its Regular program in occupational exposure and in particular of/for all new actions that will be envisaged.