



# IRPA

## **IRPA Guiding Principles for Establishing a Radiation Protection Culture**

## **Assessment Tools**

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# Assessment Tools

- ▶ Focus on the identification of the best and optimal tools required and needed to assess the level and quality of RPC
- ▶ *There is the need to identify tools as well as to **prioritize the criteria of success elements on which the assessment needs to be focused.***



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- ▶ *There is the need to identify tools as well as to **prioritize the criteria of success elements on which the assessment needs to be focused.***
- ▶ Assessment Tools should also be a combination of quantitative and qualitative tools :
  - ▶ **to measure the identified criteria of success,**
  - ▶ **to stimulate judgments and observations about positive or negative trends for the given criteria of success or even to modify them**



# Different Cultures, context and activities - one common belief -

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► **Areas:**

medical, industrial and research, third-party services

► **Ways to impact RPC in each area:**

by educating and training

by creating positive and total awareness at working place

by establishing adequate and proper communication



# Three main ways to impact RPC on the radiation application areas

In general, we can assume that the **usual ways to raise and to establish certain levels of culture** are the continuous educational processes, the access to multimedia, and the effective communication among workers, directors with workers, and workers with patients and public,



# Three main ways to impact RPC on the radiation application areas

In general, we can assume that the **usual ways to raise and to establish certain levels of culture** are the continuous educational processes, the access to multimedia, and the effective communication among workers, directors with workers, and workers with patients and public,

*but in RP we need to be more specific*

## 4.1 Education and training

**4.2 The working places** (promoting a positive work environment based on mutual respect, shared understanding.... conditions of enthusiastic effective participation to meeting open to professionals and public.... Compliance to code of ethics ..)

## 4.3 Proper communication



While implementing or trying to implement all the above activities in the various working environments like **industries, hospital, research centres on the daily life**, we still remain concerned, among the other things, about:

- ▶ the level of consciousness that we are dealing or working with a physical agent that could be dangerous for oneself and the others;
- ▶ the facts and the aspects which should be inspected and considered while evaluating the RPC status in a given facility (RT, NM, x-rays diagnostic x-rays, for instance);
- ▶ the level of information about the harms of the ionizing radiation;



While implementing or trying to implement all the above activities in the various working environments like **industries, hospital, research centres on the daily life**, we still remain concerned, among the other things, about:

- ▶ the level of knowledge of how the low doses can be harmful to the health;
- ▶ the level of knowledge of the objectives of the personnel dosimetry system;
- ▶ the presence of an effective communication between the personnel and the RSO or between the workers and the directors.



*The assessment tools should be structured in such a way **not only to obtain a picture of RP Culture at a given time, but also to help in finding trends and progresses or regressions in RPC***



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By crossing the **areas of use** of RP with the **ways of impacting** RPC as described above, a list of different tools can be indentified as **the correct and proper tools to measure and assess the degree of success in establishing and developing RPC.**

Among the possible assessment tools ... :

- ▶ **At national level for professionals and directly involved people**
- ▶ **At national level for the public awareness**
- ▶ **At local level in a medical RP application (for instance)**
- ▶ **At the level of a third party “industrial” involved in RP equipments supply (for instance)**



## ▶ At national level for professionals and directly involved people

- ▶ A program to identify **number, types and activities of the different Professional Associations** and to collect the specific activities done for RPC
- ▶ The creation of a **single web or multimedia point of contact in common with all the different Associations**
- ▶ The creation of a **questionnaire to check minimum RPC requirements** in order to be member of an Association
- ▶ **Yearly survey** on numbers and types of trainings organized at national level on RPC by the Associations or by professionals
- ▶ A specific questionnaire on knowledge and comprehension of the **RP ethical code**, to be distributed by the associations



## ▶ At national level for the public awareness

### ▶ A yearly survey on

- **Number and types of open to the public meetings and events on RP in the country;**
- **Number and types of articles published on news papers or consumers magazines;**
- **The same for TV programs and in general multimedia communications.**

### ▶ A standard method via questionnaires or self assessments **to collect the feed back coming from the public** during the above listed types of exposure to RPC.



## ▶ At local level in a medical RP application (for instance)

- ▶ To assure, via a formalized procedure, that the **workers know the principles of RP** at the moment of the job contract or to have a training organized for it. *This can be a measurable indicator: the number of workers of beginning course on RP;*
- ▶ To check if there is an **established internal procedure for refreshing** and for updating courses
- ▶ To formally charge the figure of the **RSO in order to give the free way to teach and refresh** theoretical and practical knowledge and abilities of tasks
- ▶ Formalized routine questionnaires to evaluate the workers RPC and **random checks via questionnaires about RPC for the patients;**



## ▶ At local level in a medical RP application (for instance)

- ▶ **To act face to face interviews** with RP workers and professionals as integration to the above point (*charge the figure of RSO*) and as a mean to **evaluate their real understandings and to collect suggestions and opinions**;
- ▶ **To formalize the way to collect**, to analyze and if possible, to implement **suggestions and ideas coming from workers** (classic suggestion box );
- ▶ **To check first the existence of a non-punitive method to declare and to track errors and near misses in an open and constructive way.**  
In case . . . **it should be implemented** with the support of an external independent auditor.



► At the level of a third party “industrial” involved in RP equipments supply (for instance)

- ? How to measure the level of RPC in the business
- ? people who has the intention to supply and
- ? install IR facilities for NM, RT, diagnostic imaging
- ? or industrial applications ?

It is important to assure that the facility was designed under the RPC conditions.

***This point claims the involvement of a regulatory commission;***



▶ **At the level of a third party “industrial” involved in RP equipments supply** (for instance)

- ▶ **To establish a procedure requiring that companies installing IR machines or delivering some service related to radiation sources or machines **should undergo an external independent audit** to establish if an adequate level of RPC is present and maintained at the level of the workers and the personnel directly involved in the provided activities;**
- ▶ **The reviewing of the documentation can give back information** about the degree of RPC. As a premise the organization must have a complete and redundant system of documentation in order to have a sufficient amount of information.



## Further need of specific Assessment Tools

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Some of the above presented and listed assessment tools can be considered of a general use and extended to other conditions and situations where the degree of success in establish and growing the RP culture needs to be assessed, but other more specific and peculiar tools will be needed for particular conditions.



## **Additional Slide**

### **4.1 Education and training**

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▶ **by continuing updating, with a proactive approach, not only the professionals, but also the general staff, about the evolution of scientific knowledge and related judgements of relevance in RP. Information on RP evolution by different means i.e. newsletters;**

▶ **by raising an adequate awareness among the people directly or indirectly involved in RP. Public events and meetings with capabilities to attract the public;**

▶ **by making sure that all radiological aspects are well known to workers and everybody have the correct training to take care, prevent, and evaluate RP aspects;**

▶ **by underlining that RPC is not an established area of knowledge, but one in continuous change and update, not only in its contents, but also in its approaches**



## **Additional Slide**

### **4.2 The working places**

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- ▶ **by promoting and creating a positive work environment based on mutual respect, shared understanding and adequate communication among workers, professionals by creating the conditions for enthusiastic and effective participations to meetings open not only to the workers and professionals involved in a RP service, but also to public;**
- ▶ **by collecting and by taking into account requests and suggestions emerged during such meetings and by collecting and elaborating level of satisfaction forms;**
- ▶ **by paying particular attention to the application/ compliance to Code of Ethics by the professionals.**
- ▶ **by encouraging RP professional, directors and workers to ask for help when confronted with new or unfamiliar RP situations.**



## **Additional Slide**

### **4.3 Proper communication**

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- ▶ **by providing a systematic feedback through a decision making review system; (provide the system)**
- ▶ **by setting a procedure of errors and near misses communication, by reviewing it on a regular base and by encouraging workers to examine the cases without fear of reprisal;**
- ▶ **by giving specific trainings to improve how, collectively and individually, the professionals improve their communication with the public or different publics, by both listening and providing information;**
- ▶ **by having a common/ national language used in oral and written communication;**



## Additional Slide

### 4.3 Proper communication

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- ▶ by developing better capabilities and methodologies to assess the Public concern and to listen to it;
- ▶ by creating the conditions for the professionals to apply the Guiding Principles for Stakeholder Engagements;
- ▶ by disseminating information on the latest development, strategies and future direction for proper RP ( a role for the national RP societies ?);
- ▶ by having the various RP associations involved at different levels (medicine, industry, environment...) and with specific attention to different field, to contribute to the creation of one central national contact point (web site ?) to disseminate information at national level in mutual agreement.