



PROMOTION STRATEGY AT MULTIPURPOSE IRRADIATION FACILITY “IRASM” – ROMANIA

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Multipurpose Irradiation Facility “IRASM” is the result of the TC Project ROM/08/11 between International Atomic Energy Agency and Romanian Government, started in 1993. IRASM is located near Bucharest – capital and economically most important city of Romania. Because of its experience in operating large nuclear facilities (Research Reactor, Cyclotron and Tandem Accelerators, Waste Treatment Plant, Radioisotopes Production), IFIN-HH received the responsibility to set up the irradiator.

In 1994, IFIN-HH established Radiation Processing Team (RPT) as the task force of this project. RPT working strategy considered promotion as an interactive problem between science, techniques, legislation and market. Such a complexity is the reason why irradiation technologies penetrate the market very slowly in countries with low and medium economic level. Additionally specific reasons, both objective and subjective, are responsible for this state of the art. Practical knowledge on radiation is confuse and considered unfriendly. It is a lack of proper legislation and of established control methods. Ignorance and fear, sometimes undeclared, makes promotion of radiation processing a complex and difficult task. Based on mentioned presumptions, RPT designed a Frame-Program (FP) – a puzzle of needs, necessary not only for “establishing a demonstration facility”(ROM/8/011 official objective) but also for irradiator successful operation. The Frame Program IRASM put together actions and final objectives.

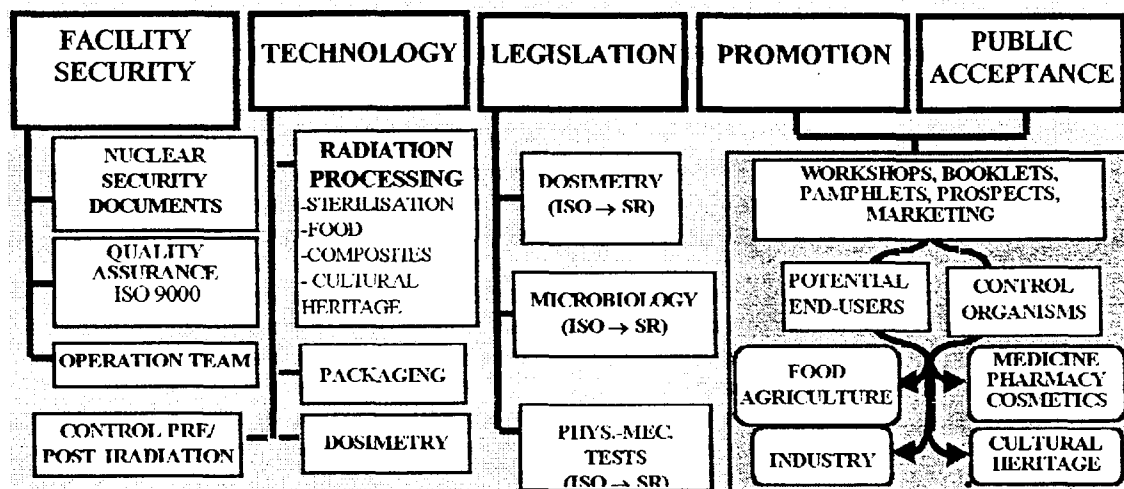


Fig.1 The Frame-Program IRASM

FP target was to prepare technical, technological and legislative bases for radiation processing promotion and the promotion itself.

Concrete actions derived from FP counted on dedicated services at the company (IFIN-HH) level: construction work supervision, safety, quality assurance. It was also important the profile of IFIN-HH permitting to agglutinate an R&D team of different specialists in radiation chemistry, dosimetry and microbiology.

Specific actions' resources came directly from the Government and from R&D national program "Orizont 2000".

The main results of this approach are:

- a facility designed and constructed in conformity with strictly followed quality assurance prescriptions, offering confidence to Nuclear and Health Regulatory Bodies
- a Final Safety Report, completed after USA regulations and completely agreed by Nuclear Regulatory Body
- basic knowledge on radiation processing of different kind of products, packaging, international licensing procedures, alternative sterilization methods, dosimetry
- adoption in Romania of most important international standards for radiation microbiology, GMP rules in drug, medical devices and dry herbs products' manufacture; ISO standards for dosimetry and packaging will be adopted soon

Because promotion itself is based on: gaining confidence on scientific bases, economic advantages for producers and benefit for common people, FP identified and used the following methods for end-user assistance:

- Starting R&D projects in partnership with possible end-users.

These projects are parts of newborn national R&D program "RELANSIN", producers oriented. RELANSIN is organized as it is European Union Program FP 5. Two projects are approved (peat sterilization for agricultural needs) and another four are in stand-by (microbial control of dry herbs, vegetables, pollen and again peat).

- Spreading information

4 information booklets of general and specific interest were published and spread. Reference papers were sent to Health Regulatory and Control Bodies concerning other countries' experience in validation / utilization of radiation technologies.

- Public meetings

Starting from 1997 RPT constantly organized or participated at national seminars and contacted end-users. To mention a few:

1997 - "Irradiation Technologies and IRASM facility" was an workshop legislators' and end-users' oriented, organized by IFIN-HH and National Atomic Energy Agency (NAEA) - 12 invited papers, a moving picture recorded at similar facilities in Hungary and Turkey, a round table focused on legislation.

1998 and 1999 - Papers presenting IRASM and its activities at national seminars "NUCINFO 98" and "NUCINFO 99" organized by NAEA, press conferences.

2000 - "Basic and Practical Knowledge on Radiation Sterilization and Microbiological Validation" - The seminar organized by IFIN-HH was held by Prof. L. Gazso, IAEA expert in radiation microbiology. It was Health Regulatory Bodies' and end-users' oriented.

- A mini-library is organized and can be consulted free of charge by everybody
- The IFIN-HH internet page contains information about IRASM
- Lobby at Governmental level

By Romanian Government Decision No. 400/1997, IRASM was nominated as Facility of National Importance. It means a state financial support by partially covering the operation cost and postponing the repay of investment until the facility will reach sufficient demands for economic independence.