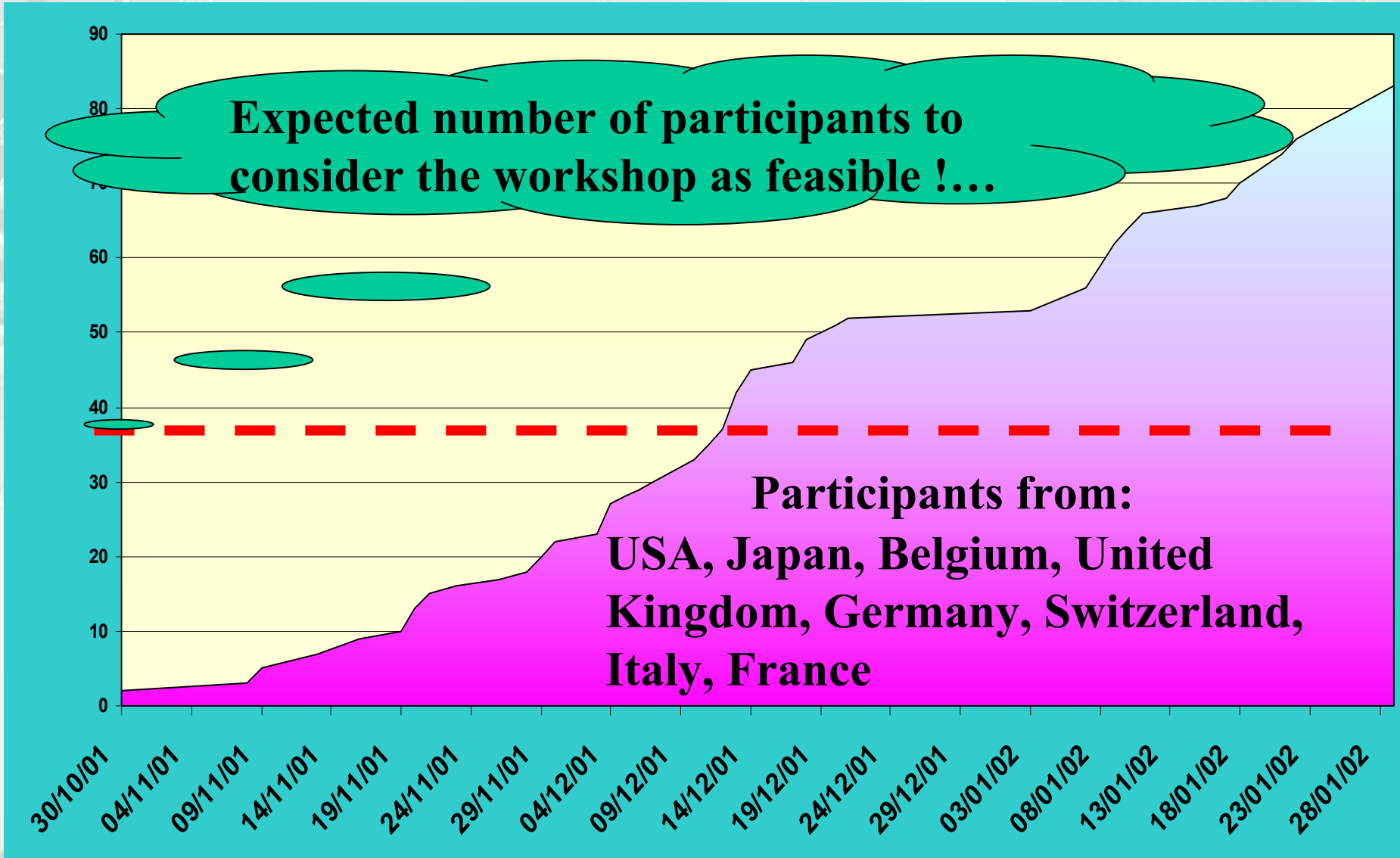




**A**CCCELERATOR  
**R**ELIABILITY  
**W**ORKSHOP

Grenoble, 4-5-6 February 2002

# About YOU !





# GOAL OF THE WORKSHOP

Talks must be considered as an introduction for **DISCUSSIONS, EXCHANGE** of information, **EXCHANGE** of **experience**.  
Time will be given after each talk + buffer time + discussion time.

Active participation is desirable. Tell your suggestions as soon as possible to organizers !

## For Technical issues:

Laurent HARDY (organizer)

Philippe DURU

Jean-Marc KOCH

Jean-Luc REVOL

Pierre Van VAERENBERGH

## For Organisation issues:

Anne-Marie VOLPE (organizer)

Karen CLUGNET

Anne DELY

Debby GOODHEW

# REMINDER: MAIN AXES OF THIS WORKSHOP

**Specificities and reliability issues for different kind of accelerators**

X-Ray sources, Medical accelerators, Accelerators for neutron production

ADS based on linear accelerator and circular accelerator, Accelerators for nuclear physics, many others !

**Ways to overcome weak points using preventive actions - Budget considerations**

Choice of the technology

Redundancy of running equipment or/and sensors

Over designed engineering

Non destructive preventing tools



## **Failure analysis and process**

Fast data logger, History database, Troubleshooting software, Electronic logbooks, Failures processing and predictions

## **Ways to shorten downtime**

Small spare parts policy, Big equipment spare part (klystron, super spare Power Supply, etc), Standby / callable policies, Operators training, Co-ordination between different control rooms

## **Damages due to radiations**

Ageing of components due to radiations, demagnetization of irradiated magnets,





## What can we learn from others ?

Invited talk from Alain Heurtel this evening:

*"Product Assurance and management of risks in ESA spatial projects : Reliability, calculations, functional risks analysis, critical items and FMECA"*

*But ... Tuesday evening invited speaker (nuclear power plant reliability) cancelled...*



## -WEAR YOUR BADGES

- necessary to: - enter on ESRF site (Vigipirate plan)
- have lunch at noon

(TAKE ALSO LUNCH TICKET WITH YOU AT NOON !)

-PAYMENTS by credit card: this **MORNING** at COFFEE BREAK to the **RECEPTION DESK**

## - CONTRIBUTIONS

DO NOT FORGET TO GIVE YOUR ELECTRONIC CONTRIBUTION TO ORGANIZERS or CO-CHAIRMEN, if not already done.

**ANY QUESTION ?**