



Infrastructures

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Infrastructures are essential in order to fulfil low dose risk research objectives. Many types of facilities are required ranging from radiation facilities like large accelerators to data bases, human cohorts, tissue banks and platforms for sample analysis. Doremi produces a review of the current status of infrastructures for radiobiology in Europe via working groups, questionnaires and meetings. Certain deficiencies were noted. First was the lack of low dose rate in vivo irradiation facilities. Two facilities were added to DoReMi: the UMB in Norway, which has been renovated and used for DoReMi projects, and the IES in Japan. It was also noted that there was a lack of facilities that allow radiation quality studies, notably those that can provide beams below 20MeV/u and above 100 MeV/u as well as microbeam facilities. The SNAKE microbeam facility was invited to join the consortium and is providing beam time for DoReMi projects.

Concerning Databases and tissue banks, within the STORE project, a platform has been developed which is becoming a trustable and viable database for data from various scientific areas in the radiation research community as well as a pointer to existing biobanks. Further, SOPs have been developed on how to best analyze biological material from past and present radiobiological studies. Within Doremi, further informations have been included into STORE in general and in particular that of existing animal studies from the several research centers following archiving, biobanking and data capture .

To optimize our efforts on infrastructures, a survey was launched . It showed that most respondents felt that the facilities that they needed were available. Indeed, financing was seen as the most significant barrier to accessing external infrastructures by radio protection scientists. This was followed by logistical issues, lack of qualified staff and laboratories at the hosting facilities.

Results obtained with Doremi sponsored infrastructures will be described.