Annex I: Evolution of the consortium and expansion of the work plan

It was recognized already in the beginning of the project, that the scientific challenges related to the low dose risk research are substantial and require a multidisciplinary approach and new competencies and capacities. Even though the DoReMi Annex I (Description of Work) included some research work to be started in the beginning of the project, it was already foreseen that research needs will be more clearly identified and justified only after the initial pilot and feasibility studies and surveys have been carried out. Therefore it was planned to launch competitive calls for proposals to deal with the emerging needs for research. A large proportion of the flexibility budget was reserved for this purpose.

The enlargement of the consortium was expected to benefit the consortium, as the additional competencies provided by new beneficiaries supplement the initial field of know-how. It would also benefit the wider research community, offering open and transparent process for additional beneficiaries to join the project and take part in the actual research.

The DoReMi consortium started its work in January 2010 with 12 original partners. The first ten new partners joined after the first competitive call, starting their work in the beginning of the 2nd project period in July 2011, and another ten new partners joined after the 2nd competitive call, starting their work in the beginning of the 3rd project period in January 2013. The third competitive call, directed to new member states, brought in four more new partners, starting their work in the beginning of fourth and last project period, in July 2014. In addition, the partial transfer of rights and obligations from partner 5 Health Protection Agency HPA to Department of Health, Public Health England DH-PHE gave DH-PHE the partner number 37. From initial 12 partners, the consortium has grown threefold.

The DoReMi work plan has been amended several times, mainly via three competitive calls for new partners, as well as via three internal calls, providing opportunities to existing partners. Also many tasks that started in the beginning of the project have been extended via internal ad hoc mechanism that has allowed the DoReMi programme to develop further and to respond to current and topical needs.

The four tables below show the enlargement of the WP's:

Table 1: WP4 Infrastructures programme enlargement

Task	Work	Starting
4.1	Survey of existing facilities for low dose risk research	2010
4.2	Characterization of infrastructure needs and roadmap of implementation	2010
4.3	Implementation of DoReMi support activities for shared infrastructures	2010
4.4	Development and implementation of access to Infrastructure	2010
4.5	**Open Access to the UMB low dose irradiation facility (FIGARO)**	**2011**
4.6	**Dose/Dose-rate Radiation Effects in Brain Cancer Risk (DDRE-**	**2011**

	BrainCancer)	
4.7	**Low dose/dose rate gamma irradiation facility for in vitro biological systems (LIBIS)**	**2012**
4.8	**Integration of STORE into DoReMi as a trustable and viable database and/or pointer to biobanks and ascertain sustainability**	**2012**
4.9	**Provision of ion microbeam irradiation facility SNAKE (MicroRAD)**	**2013**
4.10	**Laboratory infrastructure for retrospective radon and thoron dosimetry (RETRODOS)**	**2014**

Table 2: WP5 Shape of dose response program enlargement

Task	Work	Starting
5.1	Phase – shifts in responses and processes at high/low doses and dose rates	2010
5.1.1	**Low dose Gene Expression signature (LoGiC)**	**2011**
5.2	Assessing the relative contribution of targeted (DNA), non-targeted and systemic processes to radiation carcinogenesis	2010
5.2.1	**Modulation of Inflammation by low and moderate dose Ionising Radiation (ModInIR)**	**2011**
5.3	The dynamics of pre-neoplastic change and clonal development	2010
5.4	Mathematical models to link experimental findings and epidemiological data	2010
5.5	Assessing the risk from internal exposures	2010
5.5.1	**Internal Emitters in Uranium Miners (INTEMITUM)**	**2013**
5.5.2	**Assembly of internal radiation dose for UKAEA and AWE epidemiology cohorts (AIRDoseUK)**	**2013**
5.6	**Track structures and initial events: an integrated approach to assess the issue of radiation quality dependence (INITIUM)**	**2012**
5.7	**Induction and facilitation of chromothripsis by low dose ionizing radiation (In-FaCT-IR)**	**2013**
5.8	**Concerted Action for an Integrated (biology-dosimetry-epidemiology) Research project on Occupational Uranium Exposure (CURE)**	**2013**
5.9	**Low dose radiation-induced non-targeter effects in vivo: the role of microvesicles in signal transduction (Rad-Mvivo)**	**2014**
5.10	**Effects of Chronic LOw-dose Gamma Irradiation on GAstrointestinal Tumorigenesis (CLOGICAT)**	**2014**

Table 3: WP6 Individual sensitivities program enlargement

Task	Work	Starting
6.1	Molecular epidemiological studies to address the role of individual genetic variation in determining susceptibility to low doses	2010
6.2	Identification of genetic modifiers of individual cancer susceptibility and their mechanisms of action	2010
6.3	Modelling of the effects on risk prediction models due to changes in biological processes influenced by genetic variability	2010
6.4	The effect of genetic modifiers on carcinogenesis following low dose rate exposure	2010
6.5	Contribution of genetic and epigenetic mechanisms that indirectly influence susceptibility to radiation-induced cancer	2010
6.6	Implementation of the DoReMi strategy for a large scale molecular epidemiological study to quantify genetic contribution to individual susceptibility	2010
6.7	Planning expansion of research portfolio	2010
6.8	**Predicting individual radiation sensitivity with Raman microspectroscopy (PRISM)**	**2011**
6.9	**Integrating radiation biomarker into epidemiology of post-Chernobyl thyroid cancer from Belarus (INT-Thyr)**	**2012**
6.10	**Characterization of DNA lesions in the nuclear ultrastructure of differentiated and tissue-specific stem cells after protracted low-dose radiation (Zif-TEM)**	**2013**
6.11	**Mechanism of low dose response to ionizing radiation and its significance in radiation protection (RADSENS)**	**2013**

Table 4: WP7 Non-cancer effects program enlargement

Task	Work	Starting
7.1	Structuring the research effort on non-cancer effects according to the HLEG roadmap: organisation of consultation/exploratory meetings and funding integrative RTD projects	2010
7.2	Preparation of a pilot study to conduct molecular epidemiology studies in vascular radiation damage	2010
7.3	Feasibility study towards a systems biology approach of radiation response of the endothelium	2010
7.4	Pilot epidemiological study of lens opacities among a cohort of interventional radiologists and cardiologists	2010

7.4.1	**Lens opacities: Methodology implementation (ELDO)**	**2012**
7.5	Pilot study of external irradiation versus internal contamination effects on neurogenesis	2010
7.6	**Study on contribution of low dose X-radiation in induction of anti-inflammation**	**2011**
7.7	**Low dose Gene Expression signature and its impact on Cardiovascular disease (LoGiC)**	**2011**
7.8	**Study on contribution of low dose X-radiation in induction of cataractogenesis and influencing genetic and cell communication factors (LDR-OPTI-GEN)**	**2013**
7.9	**Low and moderate dose radiation effects on brain microvascular pericytes: epigenetic mechanisms and functional consequences (PERIRAD)**	**2013**
7.10	**Influence of a chronic LD and LDR exposure onto the development of Parkinson symptoms in genetically predisposed Pitx3-EYL/EYL Ogg1-/- mouse mutant (OSTINATO)**	**2013**
7.11	**Epidemiological pilot study on radiation-induced cataract in interventional cardiology (EVAMET)**	**2014**
7.12	**Effect of low doses of low-LET radiation on impaired vascular endothelium (ELDORENDO)**	**2014**
7.13	**Low-dose ionizing radiation-induced cataracts in the mouse: invivo and invitro studies (RadCat)**	**2014**