Milestones, deliverables and final report

WP1: Management and Coordination [Andrea Giuliani, CNRS]

WP2: Isotope production and purification [Ezio Previtali, INFN]

WP3: Isotope radio-purity assessment with nuclear and mass spectroscopy [Marcin Wojcik, IF UJ]

WP4: Isotope radio-purity assessment with external source approach [Laurent Simard, CNRS]

WP5: Isotope radio-purity assessment with calorimetric methods [Stefano Pirro, INFN]

| | Description of Deliverable / Milestone | Month |
|------|---|------------------|
| M1.1 | Set up of the Measurement Coordinating Panel | 2 |
| D1.1 | Organization of the general meeting and related documentation | 4,10,16,22,28,34 |
| D1.2 | Website | 6 |
| D1.3 | Annual reports (within inter-comparison among isotopes and technologies) | 12,24,36 |
| M2.1 | Overview of the isotopes available inside the consortium | 2 |
| M2.2 | Identification of the isotope producers to be contacted | 4 |
| D2.1 | Report with overview of the producers and identification of the plants | 6 |
| D2.2 | Preparation of a sequence of small enriched samples | 10,22 |
| D2.3 | Comparison between different enrichment techniques | 12,24 |
| D2.4 | Report on the chemical and physical characteristics of the prepared samples | 30 |
| M2.3 | Selection of the most reliable isotope producers | 32 |
| D2.5 | Identification of purification procedures for the enriched materials | 34 |
| D2.6 | Preparation of a standard production protocol for isotope enrichments | 36 |

| D3.1 | Report on the screening campaign of the enriched samples and sources | 10,22,34 |
|------|---|----------|
| D3.2 | Report on the MC results on expected performance of different α spectrometers | 12 |
| M3.1 | Selection of the technology for a new large surface α spectrometer | 14 |
| D3.3 | Design study of a new Ge spectrometer with different shielding options | 12 |
| D3.4 | Report on simulations of background for the α and γ spectrometers at SUNLAB | 12,24 |
| D3.5 | Working prototypes of α and γ spectrometer and related report | 24 |
| M3.2 | α and γ spectrometers ready for measurements | 30 |
| D3.6 | Report on performance of α and γ spectrometer and related measurements | 36 |
| M4.1 | BiPo-3 detector available | 2 |
| D4.1 | Report on the background of the BiPo-3 detector | 10 |
| D4.2 | Technical report on the performance of the BiPo-3 detector | 14 |
| D4.3 | Report on the internal radioactivity of the 82Se source | 18 |
| M4.2 | Validation of the ⁸² Se source | 20 |
| D4.4 | Report on all the measurements made with the BiPo-1 and BiPo-3 | 34 |
| M5.1 | Aboveground set-ups ready for characterization of calorimetric detectors | 4 |
| D5.1 | Technical report on the performance of the calorimetric detectors | 10, 24 |
| D5.2 | Report on the internal radioactivity of natural crystalline samples | 12, 28 |
| D5.3 | Report on the internal radioactivity of enriched crystalline samples | 18, 32 |
| M5.2 | Ranking of isotopes for a future large calorimetric 0v-DBD experiment | 34 |