1 Cost Estimates

Table 1 shows the estimated costs of items per NEDA detector unit and in total for a setup with 48 detectors, which is the number of detectors that are planned to be ready to be used for experiments at HISPEC from 2018. The complete NEDA array will consist of 331 detectors. The costs scales roughly with the number of detectors.

| Equipment | ltem | Cost/unit | Total cost |
|------------------|---------------------|-----------|------------|
| | | [k€] | [k€] |
| Detector | Detector unit | 1.0 | 48 |
| | Liquid | 0.4 | 19 |
| | Photomultiplier | 1.9 | 91 |
| | Voltage Divider | 0.3 | 14 |
| | Subtotal | 3.6 | 173 |
| Electronics | HDMI adapter | 0.0625 | 3 |
| | NUMEXO2 NIM carrier | 0.3125 | 15 |
| | FADC mezzanines | 0.1667 | 8 |
| | GTS NIM Carrier | 0.021 | 1 |
| | GTS mezzanines | 0.042 | 2 |
| | LINCO2 PCIe card | 0.125 | 6 |
| | NIM Crate | 0.104 | 5 |
| | Sub total | 0.83 | 40 |
| Data Acquisition | Computing nodes | 0.1 | 5 |
| | Storage | 0.1 | 5 |
| | Sub total | 0.2 | 10 |
| Mechanics and | Mechanics | 0.5 | 24 |
| Infrastructure | Infrastructure | 0.1 | 5 |
| | Sub total | 0.6 | 29 |
| Grand total | | 5.2 | 252 |

Table 1: Estimated cost per detector unit and in total for a setup with 48 detectors (2014 prices).

2 Expected Funding

The research and development phase of NEDA has already been fully funded. Table 2 shows the planned sharing of the funding (non-binding) between the collaborating countries for the full NEDA array with 331 detectors. A new MoU, with a starting time of 2016, is currently being discussed within the NEDA collaboration. Further details of the funding plan will be given in the MoU.

In August 2014 an application was submitted to the Swedish Research Council for a Swedish in-kind contribution to FAIR for participation in the construction of the NUSTAR experiments HISPEC,

DESPEC, and R3B. In this application, an amount of 60 k€ (in 2005 prices) was included for the NEDA@HISPEC project. Spain and Turkey are planning to apply for funds for NEDA@HISPEC in the future.

| Country | Planned share of funding [%] |
|----------|------------------------------|
| Bulgaria | 5.5 |
| France | 13.5 |
| Italy | 13.5 |
| Poland | 13.5 |
| Spain | 13.5 |
| Sweden | 13.5 |
| Turkey | 13.5 |
| UK | 13.5 |
| Total | 100 |

Table 2: Planned sharing of the funding (non-binding) of the full NEDA array with 331 detectors.