Endovascular approaches represent the most complex aspect of Interventional Neuroradiology - INR. The following recommendations are intended to provide optimal conditions for the practice of Interventional Neuroradiology.

Art. 1
Interventional neuroradiology uses percutaneous and endovascular procedures to treat patients with diseases of the brain, sensory organs, head & neck, spinal cord, vertebral column and adjacent structures and the peripheral nervous system in adults and children.

Art. 2
A healthcare institution can be recognised to practice Interventional Neuroradiology, if it provides at the same site, the following facilities:

- In-patient hospital beds
- Interventional angiography suite suitably equipped for these activities
- A department of neurosurgery and neurology with neuro-vascular expertise
- An intensive care unit
- A department of neuroradiology.

Art. 3
In order to be recognised as a facility approved to practice Interventional Neuroradiology, the institution shall provide the services mentioned in Art. 2 on a full time basis all year around.

Art. 4
Twenty four hours service all year around is strongly recommended.

Art. 5
It is recommended that a recognised practise of Interventional Neuroradiology, has a minimum workload of 80 cases a year for the institution, and a minimum of 50 cases a year per individual.
Art. 6

Interventional neuroradiology should ideally be practised in INR teams in which exchange of experience, knowledge and research is possible. A specialist physician with particular competence in INR after having finished the training program will be able to perform endovascular procedures as described in art 3 of UEMS Charter of Training in INR in an team with other interventional neuroradiologist. Thus solitary practice of INR is not recommended.

TECHNICAL OPERATIONAL GUIDELINES

Art. 7

It is recommended that interventional neuroradiologists, like other clinicians, have admission privileges under their care either in units dedicated to interventional neuroradiology or in other appropriate in-patient facilities.

In-patient, intensive care, and continued monitoring beds should be made available in sufficient numbers to accommodate patients of interventional neuroradiologists, at any time.

Art. 8a

In order to provide a comprehensive service as stated in Art. 2, the necessary medical staff should include:

- a minimum of two, optimally four, physicians with particular qualification or other acceptable training in Interventional Neuroradiology.
- To provide continuity, the neuro-anaesthetist or anaesthetist in charge should have experience in caring for patients during INR.

Art. 8b

It is recommended that each intervention is performed with the immediate availability of a minimum of the following experienced individuals:

Scrubbed staff:
- an interventional neuroradiologist
- a second interventional radiologist or a nurse/radiographer

Non scrubbed staff:
- a radiographer
- a nurse or a nurse assistant
- anaesthetist should be required, according to local regulations.
Art. 9

The practice of Interventional Neuroradiology requires having access at all times to properly staffed facilities:

- diagnostic neuroradiology
- appropriate laboratory testing
- neuro-intensive care

Art. 10

Considering any local regulations, the practice of Interventional Neuroradiology, requires:

- a digital angiography suite accommodating anaesthesia and aseptic conditions similar to an operating theatre,
- as a minimum a single plane high resolution DSA C-arm and the ability to perform 3D imaging in at least one diagnostic modality, i.e. CT, MRA or angiography or, optimally, a bi-plane digital angiography unit with three-dimensional image reconstruction capabilities.
- radiation protection measures in accordance with national regulations

Art. 11

Sites regularly treating paediatric patients, must have all facilities including:

- a digital angiography suite for Interventional Neuroradiology
- a postoperative recovery unit,
- appropriate medical facilities and a general environment

all adapted to newborn infants and children.

Anaesthesia should be administered by medical and paramedical staff who are skilled in treating and caring for paediatric patients.

Art. 12

Provided all above is fulfilled the interventional neuroradiologist is can be responsible for the patient’s care, which includes: pre-operative examination and consultation, documented informed consent, per-operative and post-operative management, follow-up consultations in an out-patient clinic.

This Charter was unanimously approved by the UEMS Division of Neuroradiology in their meeting 2011-02-04.