

## PROPOSAL FOR A NEW WORKING GROUP (WG)

<b>Name of WG<sup>1</sup>:</b>	Artificial Intelligence (AI)
<b>Parent Committee(s)<sup>2</sup>:</b>	Scientific Committee, supported by Projects Committee and Professional Matters Committee
<b>Keywords<sup>3</sup>:</b>	Artificial Intelligence, Machine Learning, Deep Learning, Neural Networks, Big Data
<b>Chair(s)<sup>4</sup>:</b>	Suggested chair: Federica Zanca (BE)
<b>Expected outcome<sup>5</sup>:</b>	AI for Medical Physicists Curricular and Professional Program, and ESMPE AI module.
<b>Target audience<sup>6</sup>:</b>	EFOMP members / NMOs, medical physicists, radiology professionals, computer scientists
<b>Rationale<sup>7</sup>:</b>	Big data and deep learning will profoundly change various areas of professions and research in the future. This will also happen in medicine and medical imaging in particular. Quantitative aspects of data validation, QC and system modelling for the future AI methods are positioned firmly in the field of Medical Physics profession. It is our interest to ensure that our professional education, continuous training and competence will follow this significant global development.
<b>Coordination<sup>8</sup>:</b>	Coordinated as an EFOMP WG. Reference: Kortesiemi M, Tsapaki V, Trianni A, Russo P, Maas A, Källman HE, Brambilla M, Damilakis J. The European Federation of Organisations for Medical Physics (EFOMP) White Paper: Big data and deep learning in medical imaging and in relation to medical physics profession. Phys Med. 2018 Dec;56:90-93.

*This proposal form must be filled by the EFOMP parent committee chair.*



<b>Category:</b>	WGs are classified into the following categories depending on their topic and purpose. Please choose the most appropriate.
<input checked="" type="checkbox"/>	<b>New Horizons.</b> The topic involves new scientific developments, methods, technology or clinical applications that have not yet emerged into clinical practice.
<input type="checkbox"/>	<b>State of Art.</b> The topic involves codes of practice, protocols, recommendations or guidelines for activity which are expected to become enduring practice.
<input type="checkbox"/>	<b>Focus Area.</b> The topic involves certain specific area of clinical interest, modality or method which may include a technical or methodological challenge to be solved.
<input type="checkbox"/>	<b>Educational or Informational.</b> The topic involves education or informing the members in a relevant area of clinical practise, technology, methods, research or training.
<input type="checkbox"/>	<b>Consensus Document.</b> The topic involves a consensus of the medical physics community on a certain area of interest that the EFOMP will endorse. This category may include e.g. safety issues or professional issues.
<b>Members<sup>9</sup>:</b>	The core group will be of 5 to 10 people. Members will be nominated according to EFOMP official policy, after the announcement and recruitment procedure. Suggested member: Annalisa Trianni (IT) - Liason with EuSoMII
<b>Consultants/Observers<sup>10</sup>:</b>	Consultants and observers will be nominated according to EFOMP official policy, after the announcement and recruitment procedure.
<b>Funding<sup>11</sup>:</b>	No funding (as initially planned).
<b>Timeline<sup>12</sup>:</b>	Two years WG duration: Jun 2019 WG establishment and initial working plan, Oct 2019 planning of the learning modules (related to ESMPE), Jan 2020 AI for Medical Physicists Curricular and Professional Program (including CPD model) drafted, Jul 2020 ESMPE AI module, Dec 2020 Program for approval, Apr 2021 AI for Medical Physicists Curricular and Professional Program published.
<b>Proposed outline of the final report<sup>13</sup>:</b>	The final report will be the AI for Medical Physicists Curricular and Professional Program.



## Legend

- 1) **Name of WG** - Including an indication of the WG type - i.e. if the WG will be a Joint WG.
- 2) **Parent Committee(s)** - Relevant EFOMP Committee.
- 3) **Keywords** - include at least 3 keywords.
- 4) **Chair(s)** - The chair of the parent committee will propose the chair of the WG.
- 5) **Expected outcome** - Description of the relevant results expected from the WG.
- 6) **Target audience** - e.g. Medical Physicists, Vendors.
- 7) **Rationale** - What is the justification and need for the proposed WG.
- 8) **Coordination** - The parent committee chair has to specify if there is a coordination or collaboration with other EFOMP Committees, WGs and/or scientific organisations.
- 9) **Members** - Proposed list of active members based on the feedback on the WG announcement from NMOs, potentially interested experts within the medical physics community and the EFOMP Board will be composed by the parent committee chair together with the proposed WG chair. The proposed member list has to be approved by the EFOMP Board. WG members have to create an efficient and optimal composition of expertise and professional coverage. WG members can be updated also later if and when needed.
- 10) **Consultants/Observers** - Proposed other WG participants who are indicated as consultants or observers. The parent committee chair together with the proposed WG chair will identify possible consultants/observers.
- 11) **Funding** - Description of the WG funding needs (meetings, etc.) and how the finances will be acquired and managed. This part is optional and can also be zero.
- 12) **Timeline** - WG timetable described by main milestones and reporting. Interim progress reporting must be provided at least in 6 months intervals.
- 13) **Proposed outline of the final report** - What should be included in order to reach the planned outcome.