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SC

United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation,
la science et la culture

Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования,
науки и культуры

منظمة الأمم المتحدة
للتربية والعلم والثقافة

联合国教育、
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DRAFT RESOLUTION

Submitted by GERMANY

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GREECE, KENYA, KUWAIT, MADAGASCAR, POLAND,
SPAIN, TURKEY, UKRAINE

UNESCO Engineering Initiative

The General Conference,

Considering that engineering plays an important role in addressing the complex challenges of our world, poverty reduction, sustainable development and sustainable use of resources, especially in the framework of increasing urbanization and water scarcity as well as mitigation and adaptation to environmental change,

Recalling 35 C/Resolution 32 and 186 EX/Decision 15,

Welcoming the launch of the UNESCO Engineering Initiative with its preliminary elements such as strengthening engineering at universities, engineering capacity-building, policy work and mobilizing civil society support, aiming at strengthening engineering, in particular, in the developing world and in Africa,

Considering that the UNESCO Engineering Initiative has been welcomed at the World Engineer's Convention 2011 in Geneva,

1. *Requests* the Director-General to particularly focus on engineering education, especially at the universities and targeting curricular innovation, with a view to gear engineering education towards sustainable development, the attainment of the internationally agreed development goals and other emerging challenges, and to build in this regard, as well as on the lead role of UNESCO in the United Nations Decade of Education for Sustainable Development;

2. *Requests* the Director-General to pursue all activities within the UNESCO Engineering Activities as far as possible in an intersectoral and interdisciplinary fashion, integrating all sciences, especially in the areas of policy work and mobilizing civil society support;
3. *Invites* Member States, their higher education institutions and national engineering associations, where they exist, to cooperate closely with UNESCO in its Engineering Initiative through South-South and North-South-South partnerships;
4. *Requests* the Director-General to seek partnerships with different sectors of society, including the private sector, institutions in higher education, international and national engineering associations, in particular WFEO, as well as other NGOs when implementing the UNESCO Engineering Initiative, including for the provision of extrabudgetary resources as appropriate;
5. *Requests* the Director-General to present progress reports on the implementation of the UNESCO Engineering Initiative to the Executive Board at its 190th session and to the General Conference at its 37th session.

Explanatory Note:

1. Engineering is crucial for innovation and economic development, but it is also a key factor in advancing social and human development, especially in addressing global challenges such as poverty alleviation, energy, climate change, land degradation and water scarcity.
2. At the same time, engineering is an evolving part of society. As the UNESCO Engineering Report of 2010 has demonstrated, there are serious concerns all around the world about a decline of interest and enrolment by young people in engineering and therefore shortages of engineers, and about the brain drain from developing countries.
3. The Executive Board at its 185th session had asked the Director-General for proposals regarding the strengthening of education, capacity-building and research in the field of engineering, in the context of the submission of the Draft Programme and Budget for 2012-2013 (36 C/5).
4. In document 186 EX/INF.4, the Director-General made her first preliminary proposals on a flexible, cost-effective, cross-cutting UNESCO Engineering Initiative whose objective was to address key challenges of engineering education, capacity-building and development. Answers will be sought why young people around the world are turning away from engineering and how this may be addressed, the public understanding of engineering will be promoted, as well as the effective application of engineering and green technologies to poverty reduction, sustainable development and climate change.
5. Document 186 EX/INF.4 has noted strong interest on collaborating on this UNESCO Engineering initiative, as expressed by the World Federation of Engineering Organizations (WFEO), organizations such as the International Council of Academies of Engineering and Technological Sciences (CAETS), International Federation of Consulting Engineers (FIDIC) and Engineers Without Borders (EWB). As could be witnessed at the World Engineering Convention in Geneva 2011, international and national engineering associations are interested in joining the UNESCO Engineering Initiative. A crucial objective will be to align engineering education with the objectives of the United Nations Decade of Education for Sustainable Development, in order to fully leverage engineering expertise to the benefit of mankind. This task can only be addressed by joining the efforts of UNESCO, its Member States, as well as international and national associations and institutions involved in promoting engineering.