Engineering Council of South Africa

Comment on:

The Higher Education Qualifications Framework: As Revised

Government Gazette No 34883, 23 December 2011

Approved by the Education Committee and the Engineering Standards Generating Body: 21 February 2012

1. Background

The Engineering Council of South Africa (ECSA), in consultation with the Deans of Engineering at universities and universities of technology, its Education Committee, its Accreditation Committees, and the Engineering Standards Generating Body has considered the proposed revision of the Higher Education Qualifications Framework (HEQF). ECSA now submits the following comments for the consideration of the Department of Higher Education and Training.

2. General Support for Revised HEQF

ECSA, in consultation with the Deans of Engineering, made a detailed submission on shortcomings in the HEQF to the Council on Higher Education in December 2010. The revision of the HEQF now published has taken the substantive proposals made by ECSA into account. The Revised HEQF therefore has the support of ECSA.

It is believed that, based on standards developed by ECSA, higher education providers will be able to construct programmes and pathways that meet the educational requirements for Engineers, Engineering Technologists and Engineering Technicians. Reasonable opportunities for articulation between pathways and progression to higher degrees can be provided.

3. Areas of clarification and improvement

While expressing our general support for the Revised HEQF, a number of areas of clarification and improvement have been identified.

Page 13: 2nd paragraph: Level Descriptors

The concept of the level descriptors being the outermost layer of the qualifications specification is accepted as a broad principle. We understand that SAQA is the custodian of the level descriptors and has published the document "Level Descriptors for the South African National Qualifications Framework", which appears still to be a public comment document. We also understand that the level

descriptors are "broad qualitative statements against which more specific learning outcomes can be compared and located". The level descriptors are not useful until contextualized in a field.

ECSA has the experience of developing standards for qualifications at NQF Levels 5, 6, 7 and 8 and has used outcomes and level descriptors that are internationally benchmarked for engineering professional qualifications. Our observations when comparing our standards with NQF level descriptors are the following:

a) The level of demand in the knowledge categories A-C of the NQF level descriptors at levels 6 to 7 is greater than we have found to be warranted in practice. Without detailed comparison, the level 5 descriptors may also be pitched at too demanding a level. For example it is unlikely that the graduate of a level 5 exit qualifications is able to "demonstrate knowledge of the main areas of one or more fields, disciplines or practices, including an understanding of the key terms, concepts, facts, principles, rules and theories of that field, discipline or practice"
b) There are notions that may be valid in some fields but are inappropriate in others. With reference to category B, level 7, knowledge is not regarded as contested in our field. There is, for example, a substantial body of fundamentals on which engineers rely absolutely.
c) The level of problem solving indicated in category D is in excess of that in our standards at levels 6 and 7.
d) The level descriptors cover ten categories A to J. Some of these are particularly applicable in educational programmes while other are more suited to occupations and professions. For example, the level of responsibility and accountability and the expectation of a student to take responsibility for the learning of others are excessive for educational qualifications. For example, does one expect a level 7 graduate to take accountability for the decision and actions of others (category J)? An education qualification cannot have all the attributes A to J, nor could an occupational qualification.

We conclude that the NQF Level Descriptors in their present form may be problematic when locating the standards for actual programmes that, by all other measures, are fit for purpose. Contextualisation is necessary in developing standards at the designator level.

Pages 24 and 25: 240 Credit Diploma

The introduction of a 240 credit diploma that will require accreditation by a profession is welcomed. (Professionally-oriented 360 credit diplomas will also require accreditation.) The removal of the requirement for 60 credits at Level 7 in the 360 credit diploma is welcomed.

Given potential confusion between different types of diplomas, careful naming conventions, using the qualifier within the HEQF naming rules, will need to be worked out by individual professions to

enable the two types of diploma to be distinguished. Professions will need to be clear in their lists of accredited diplomas on the recognition of different types of diplomas.