STRENGTHENING HIGHER EDUCATION IN BULGARIA

Options for improving the models of governance, quality assurance and financing of higher education
Bulgaria

**Strengthening Higher Education in Bulgaria:**

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1. Executive Summary

Overview of the major developments in higher education in Bulgaria

1.1. In 2007, Bulgaria joined the European Union (EU). In that context, the government’s objective to accelerate the social and economic convergence to EU norms requires increased productivity and a labor force equipped with the high-order skills demanded by a rapidly developing knowledge-based economy. Such knowledge-based workers are expected to have tertiary education. There is extensive evidence that effective tertiary education investment increases a country’s ability to make leading-edge innovations. Highly skilled people are also more adaptable in the face of changing labor market needs. Further, tertiary education and research are among the key foundations of European integration: through provision of skills and knowledge that promote labor mobility, and through participation in the European Higher Education Area (the Bologna process) and the European Research Area.

1.2. Since 1989, Bulgaria’s higher education sector has undergone significant transformation, marked by a rapid transition from overregulation to academic and institutional autonomy of higher education institutions (HEIs) (1990 and 1995), introduction of the three-stage (bachelor, master and doctor) structure of higher education degrees (1995), redesign of public HEI governance models (1999), and introduction of per capita financing linked to student enrollment (1999). Bulgaria’s participation in the Bologna process since 1999 has led to the institutional reorganization and strengthening of the National Evaluation and Accreditation Agency (NEAA) and its membership in the European Association for Quality Assurance in Higher Education (ENQA) and the European Quality Assurance Register (EQAR).

1.3. A 2011 European Commission (EC) communiqué on “Supporting growth and jobs—an agenda for the modernization of Europe’s higher education systems”\(^1\) denotes five key areas for reform:

- increase the quantity of higher education graduates;
- enhance the quality and relevance of human capital development in higher education;
- create effective governance and funding mechanisms;
- strengthen the ‘knowledge triangle” between education, research, and business; and
- expand the internationalization of higher education.

1.4. The rapid expansion of private HEIs, in parallel to the upward trend of enrollment in public universities, has changed the sector’s size and structure and enhanced competition among providers. The number of higher education students increased by 16% in the last ten years while the number of secondary education graduates dropped by 13% over the same period. The net enrollment rate for tertiary education has reached 41% of the population aged 19-23 (2010). Three main consequences have emerged from the expanded coverage of tertiary education: increased student-teacher ratios, decreased unit costs for higher education, and greater heterogeneity of students with regard to their skills and learning capacity.

1.5. While internationalization is useful tool for improving higher education, it need not be an immediate area of reform intervention, given that the key priority concerns of quality, relevance, governance, finance, and efficiency are most immediately pertinent to Bulgaria and are, therefore, the core considerations of this report.

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1.6. Despite the quantitative achievements during the past two decades, higher education in Bulgaria continues to face challenges with regard to quality, accountability, finance, and efficiency for results. Recent reform initiatives have started addressing some of the weaknesses. Amendments to the Higher Education Act in 2010 and 2011 allowed HEIs to perform research activities on a contractual basis with state and private users as well as for other HEIs, allowing institutions to become partners with other HEIs (local or international) and organizations. These amendments also introduced new legal grounds for the delivery of joint graduate or PhD programs, including through franchise arrangements. Further, amendments to the Academic Staff Development Act in 2010 replaced the centralized system for career development of academic staff with a new system providing autonomy to HEIs and research institutions to adopt and implement their own staffing policies. Another major reform related to the funding model has been the gradual reorientation toward a stronger focus on HEIs performance, starting with a small performance awards envelope in 2011, and further enlarged and refined in 2012. This funding reform followed a major undertaking to collect information on educational outcomes and graduate employment in 2010 and 2011 as part of the Bulgarian Universities Ranking System (BURS) initiative. In the second half of 2011 legislative amendments laid the foundations for competition on the quality assurance market by allowing ENQA and EQAR member agencies to conduct program evaluations of Bulgarian HEIs. The accreditation grading scales were revised to allow greater differentiation among accredited HEIs. The NEAA revised its institutional and program evaluation criteria in a bid to provide common ground for future consolidation of bachelor, master and PhD degrees’ program evaluations. The revised evaluation criteria contain a new section with indicators that places a greater focus on the quality of education and research activities of HEIs and provides assessment of the competitiveness of evaluated HEIs. Bulgaria should follow up on these reforms and implement integrated measures to increase the quality and efficiency of its tertiary education by revisiting the models of governance, quality assurance and financing of higher education. These elements need to be addressed in a long-term vision and strategy for higher education, currently missing in Bulgaria.

Outstanding challenges in higher education and options for reforms

1.7. Accreditation and quality assurance

1.7.1 Challenges:

- **Weak evaluation and accreditation criteria.** As in many other EU member states, the NEAA accreditation framework evaluates a set of general prerequisites for quality delivery, though in Bulgaria greater attention is paid to inputs rather than results. Even with the latest revisions to the evaluation criteria, quantitative indicators still dominate over qualitative ones. These weaknesses are further extended into the systems for self-evaluation of the HEIs and the post-accreditation monitoring and control (PAMC). While the heavy reliance on self-evaluation and quality improvements driven by the HEIs has proven effective in other contexts (USA, Canada, for instance), Bulgarian quality assurance (QA) efforts have often been obstructed by the weak criteria used by NEAA in the evaluation and accreditation process, creating incentives for pro-forma self-evaluation.

- **Burdensome design of the evaluation and accreditation procedures.** The legal requirement to accredit and evaluate each professional field and every specialty for regulated professions and doctoral studies puts significant pressure on: 1) NEAA’s human resources; and 2) the larger universities offering a wider selection of professional fields, which undergo seemingly constant cycles of accreditation.

- **Inadequate involvement of external stakeholders and foreign experts.** The evaluation and accreditation process is not yet sufficiently open for participation by prominent foreign experts, the business community or other stakeholders relevant to a professional field. The results from evaluations are not published in full and the information disclosed lacks justification of the ratings granted.
• **Concerns about the autonomy of NEAA.** By law, NEAA is designed as an independent agency under the Council of Ministers to reduce influence from both the policy makers at central level (the Ministry of Education Youth and Science, MEYS) and the HEIs subject to evaluation. In practice, however, NEAA is a second level budget spending unit under the MEYS, while the Ministry of Finance decides on the most important element of NEAA’s revenues—the fee levels for program and institutional evaluations of HEIs. Further, NEAA’s independence from some HEIs may appear ambiguous, considering the composition of the evaluation committees tasked to implement the accreditation procedures.

1.7.2. **Options for reforms:**

• **Greater focus on qualitative dimensions in the evaluation criteria and simpler evaluation procedures.** The NEAA may want to consider merging institutional and program accreditation activities while further sharpening the focus of the evaluation criteria by paying more attention to the qualitative dimensions of the evaluated institutions and programs. The relative weight of the newly introduced indicators measuring the education and research quality and competitiveness of HEIs should be increased significantly from their present weight of 15% in the overall evaluation score.

• **Improve credibility and rigor of NEAA evaluations by greater involvement of employers and prominent international experts.** Program evaluation would greatly benefit from the expanded involvement of prominent international experts and representatives of professional organizations, who can add value in assessing the comparative quality of programs and in ensuring that the employers or employers’ associations are better represented in the assessment process. An assessment by an external body would provide an additional layer of assurance that program accreditation is rigorous and without conflict of interest.

• **Increase the financial autonomy of NEAA.** The current rules and procedures for defining the fees for program and institutional evaluation of HEIs should be revised to allow NEAA, and not the Ministry of Finance, to have a say over evaluation fee setting.

• **Use EU funded operational programs or other EU funding sources to cover the higher costs for participation of world-class international experts in the evaluation expert teams of the NEAA.** Alternatively, the same EU sources could be used to co-fund the evaluations of foreign agencies (members of ENQA and EQAR) so that costs for evaluations paid by the evaluated HEIs are equal to the fees charged by the NEAA. The use of EU funds for such a strategic and high impact initiative may significantly improve the quality assurance framework in Bulgaria and the quality of tertiary education as a whole.

• **Institutionalize the collection and use of quality- and performance-related data in the Bulgarian University Ranking System (BURS) as part of the QA framework.** The government has to ensure the sustainability of the BURS and identify a prominent role for it in the tertiary education QA framework. It is recommended that the range of data collected for BURS be expanded and complemented by a full-fledged graduates and employers’ tracer study, thus bringing in more comprehensive information on the educational and labor market outcomes of graduates.

1.8. **Governance**

1.8.1. **Challenges:**

• **Limited declared strategic priorities in higher education.** Bulgaria has adopted strategic documents for all stages of formal education but higher education. Key European policies related to higher education, research and innovation have been reflected in various government decisions, programs or other sectoral strategies (including a Lifelong Learning Strategy and a separate strategy for research), leaving the sector without a comprehensive strategic document that outlines
the vision and the future of higher education in Bulgaria, especially as it relates to governance, quality assurance and funding.

- **Public HEIs are governed for the benefit of the academic staff.** Under the existing legal framework, all strategic decisions of the public HEIs concerning academic life, management of resources, control and compliance are in the hands of the HEIs’ academic staff, which are excessively represented in all governing and controlling bodies of these institutions. The rector is selected, appointed by and reports to the General Assembly, in which at least 70% of the votes come from the academic staff (at least 15% from students and administrative staff), the ranks of which the rector is likely to rejoin after having served his/her term of office.

- **Weak connection to external stakeholders.** The link between public HEIs and the education stakeholders who are external to the institution is weak and the establishment of the Councils of Trustees (2007) to represent the broader public interest has not affected HEIs’ performance because of the very limited powers entrusted to the councils.

- **Unmet need for professional management of public HEIs.** The current governance model has led to some inefficiencies in the management of financial and human resources of public HEIs. In addition, the surveys and hard data collected on graduates’ employment as part of the Bulgarian Universities Ranking System (BURS) provide evidence of obvious disconnects between the policies and programs of some HEIs and labor market needs, reflecting weak relevance of the knowledge and skills produced by some university programs.

### 1.8.2. Options for reforms:

- **Change the model of public HEIs’ governance by establishing Governing Boards:** The governance reform should start with the transformation of the Councils of Trustees into authentic governing boards, to serve as the main organs governing public HEIs. Two thirds of the governing board should be appointed from outside the university to represent key external stakeholders, including employers, civil society, government, labor unions, etc. The members elected by academic staff (one third) may represent the key internal stakeholders of the institution: faculty, students, academic managers, staff, and alumni. The chair of the board may be selected independently by the board members or appointed by the government or the president from the roster of appointed members. The board should govern the affairs of the public HEI by: (a) developing broad administrative and management policies for the institution; (b) providing broad direction and coordination to the development of academic programs in relation to the HEI’s strategic plan; (c) approving the budget and overseeing the efficient management of funds, property, facilities, and investments; (d) appointing the rector, as chief executive of the institution. The establishment of strong governing boards should keep intact the academic autonomy of public HEIs and the mandate of the academic council to debate and decide on academic matters.

- **Develop a strategy for the higher education sector.** MEYS should initiate and participate together with all relevant higher education stakeholders in a strategic planning process to develop a vision and strategy for the future of higher education in Bulgaria and an actionable program for its implementation.

- **Incentivize strategic planning at institutional level.** The government should provide appropriate incentives for HEIs to conduct their own strategic planning and develop integrated strategies covering all issues of governance and management of the institution (e.g. by employing a tested methodology such as the Balanced Score Card)

### 1.9. Financing higher education

#### 1.9.1. Challenges:
• **Underfunding of higher education.** Bulgaria has gone through a decade of underfunded expansion of its higher education sector. By international and European standards, both public and combined public and private funding of tertiary education is low in terms of share in GDP and controlling for purchasing power parity. The objectives to improve quality and equity in addition to meeting the access and participation targets set out in the Lisbon and Europe 2020 strategies requires the mobilization of additional resources, both public and private, should the Government be set on meeting these objectives within the envisioned timeframe. Subject to addressing the unresolved efficiency problems in the system, public investments in higher education need to grow, as a high-quality system is likely to be a well-funded one.

• **Underutilized potential of the student loans scheme.** The strict eligibility criteria for loans covering living expenses and the low fees for the less expensive tertiary education programs into which most students in Bulgaria enroll undermine the student loans’ popularity. Thus, the potential for mobilizing additional private resources into the higher education sector (in volume, which the state budget cannot afford) is currently limited.

• **Inflexible tuition fees-setting mechanism.** The current practice of tying the level of fees to the per student expenditure norms for defining the state subsidy for HEIs in the permanent legislation creates unnecessarily inflexible conditions for adapting fee levels to institutional norms and needs, usually requiring frequent changes to the main law instead of giving greater flexibility to public HEIs to define tuition fee levels. Furthermore, the mechanisms for setting the minimum tuition fee levels for the different academic programs should not be tied only to the recurrent costs for delivering the educational service to students. Fees could be tied to future earnings, and their payment could be regulated through income-contingent repayment schemes.

• **Limited role of HEI’s performance in the allocation of funds.** Until recently, funding of HEIs was almost exclusively based on the number of students enrolled, without adequate relation to performance objectives or educational outcomes (such as the number of graduates achieving a pre-defined performance standard). Despite recent initiatives for reform, most notably the introduction of key performance indicators (KPIs), the existing funding arrangements are not likely to have significant impact on HEI policies nor spur a system-wide drive for better performance, since performance allocations to HEIs are still a small proportion of the overall budget and are dispersed among too many programs and faculties of HEIs. A conceptual weakness of the current KPIs approach is that it awards past performance instead of creating incentives for all HEIs to improve performance in the near future, (e.g. through performance-based contracts with HEIs).

• **Lack of strategic focus in financing public HEIs.** Public resources for higher education institutions have not been used to steer longer term, strategic policy reforms. The planning and allocation of state subsidies to HEIs is not yet fully aligned with the outcomes or labor market demands despite the recent innovation marked by the launch of the BURS and the comprehensive performance data contained in that rankings system.

1.9.2. **Options for reforms:**

• **Increase public funding for higher education to 1% of GDP in the medium run.** Such an increase of public resources for the sector should take place with an agreed ceiling on public contribution of 60% of the total funds, within a broader finance reform package, including the options suggested below, and intended to influence quality, relevance and efficiency.

• **Make fee-setting arrangements more flexible.** In line with the increased public funds for higher education, own source revenues of public HEIs need to grow, should their 40% share be kept. This implies, but does not mandate, future pressures for increases in tuition fees, especially in HEIs that fail to attract more non-fee private resources. Fees-setting could become more flexible by (a) deregulating fee setting altogether, while ensuring information on tuition fees of all universities (public and private) is made public (b) untying fees from the expenditure norms and imposing
differentiated minimum and maximum levels, or (c) introducing broader ranges with minimum and maximum levels, e.g. from 30 to 80% of the per student expenditure norms. Furthermore (and related to the recommendation on student loans below), the Government may consider income-contingent fee schemes, such as those in the UK and Australia, which defer payment of established fees during enrollment and base repayment amounts on the income levels achieved after degree completion (or drop-out).

- **Make the student loan scheme more palatable for the public.** The first step in this direction may be to make the loans for living costs accessible for all full-time students. To make loan repayment conditions more attractive, the loan scheme needs to be redesigned by including the tax administration/social security system to track and handle repayments from higher education graduates; this is a prerequisite for converting the scheme into an income-contingent loan scheme whereby loan repayment is set as a percentage of the graduates’ future income and collected through the income tax system.

- **Refocus the existing scholarship programs.** The above reforms may be rolled out together with a revised policy of existing scholarship programs funded by the state budget and EU programs to target only the most academically qualified low income students in selected priority fields and programs.

- **Further increase the share of the performance-based component in the funding of public HEIs.** The government needs to carefully review the KPIs used for performance awards and check regularly their impact and validity. In the short and medium run, the government could consider increasing the share of the performance-based component in the total funding of HEIs first to 10% and then gradually, over a five-year period, and combined with the introduction of forward looking performance based contracts with the public HEIs, increase the share of performance funding to 20-30%.

- **Introduce performance contracts with public HEIs.** The Government may consider the option of transforming the current KPIs into indicators measuring performance targets included in multiannual, forward looking, performance contracts with the public HEIs. Thus, instead of rewarding past performance, the current KPIs may be used to provide incentives for future improvements to all HEIs and faculties. Such performance contracts span a period of 3-4 years and reward only those HEIs / faculties that meet the performance milestones and targets. The performance contracts should combine top-down and bottom-up approaches to define performance targets, based on the government’s priorities and HEIs’ responses to them in their individual target setting.

- **Consider the option of introducing matching grants.** Government may provide matching grants to encourage HEI efforts to raise funds from industry and philanthropists.

- **In the long run, consider a shift from funding enrollments to funding graduates of HEIs who meet a set of predefined criteria.** As the quality assurance framework firms up and greater rigor is introduced into learning assessments, the government may explore the option to base the core funding formula on the number of graduates meeting predefined criteria (as in the Netherlands) instead of the number of enrollments. In this process, due attention should be paid to develop strong buffers against possible unintended consequences (e.g. loosening the rigor of student assessment to ensure graduation of students).

1.10. **Efficiency**

1.10.1. **Challenge:**

- **Large number of small, specialized public HEIs** The higher education landscape in Bulgaria is characterized by a large number of small, specialized public HEIs. Small HEIs are unlikely to gain the critical mass of researchers, usually across disciplines, needed to achieve the declared objective
of the government to make universities key players in the research and innovation scene. This is a concern from a fiscal, research and development, and governance point of view. Moreover, the low student to academic staff ratio of these small public HEIs fosters spending inefficiencies in the sector.

1.10.2. Options for reforms:

- **Consolidate universities and tertiary institutions.** The government may consider financial and non-financial incentives for merging some of the public HEIs into larger institutions or creating a smaller number of comprehensive universities with larger average enrollment than at present. The challenge anticipated in considering the consolidation or merger of universities is a classic example of change management negatively affecting strong vested interests. Hence, it would require fully defined and committed policy foundations and capable change managers using fair and transparent criteria. The benefits of such consolidations or mergers would need to be articulated to all affected parties, especially the concerned university faculty and rectors. China and Hungary provide examples of successful mergers of such institutes through bold government action, despite considerable opposition from the universities. The Hungarian reforms of 1996 managed to consolidate (by 2007) around 100 specialized institutions into 30 larger comprehensive universities.

Prioritizing these challenges and reform options

1.11. In the short-term, it is imperative that the Government of Bulgaria selectively prioritizes the components of its reform agenda in order the focus attention and resources in order to maximize impact. Short-, medium-, and long-term planning for addressing the entirety of these relevant issues will allow for targeted immediate interventions and long-term strategic planning, both of which are vital to creating a stable and useful higher education sector for Bulgaria. Below are recommendations for targeted first-stage reforms, should such recommendations prove useful in directing immediate attention to specific interventions among the menu of reform options presented throughout the report.

- **Key priority #1: Quality.** The quality of higher education in Bulgaria would receive a significant boost if EU resources in the next programming period (2014-2020) are used to support carefully selected, high impact interventions, among them: (i) funding the participation of world class researchers and academics in the evaluation and accreditation procedures of NEAA or other accrediting institutions, and (ii) supporting interventions that enhance the research capacity of tertiary institutions in Bulgaria.

- **Key priority #2: Finance reforms.** The Government should continue to increase the share of performance based financing model and use it as a tool for achieving long term strategic policy objectives. At the same time, funding arrangements should ensure equal access to higher education and adequate incentives for top performing students.

- **Key priority #3: Governance.** Higher education stakeholders in Bulgaria should work together towards restoring the balance between the public interest and the interest of the academic staff in how public HEIs are managed. A priority reform would include revisions to the existing management structures of public HEIs to ensure strong mechanisms for accountability of academic staff, especially as they relate to the educational outcomes of students and graduates.

- **Key priority #4: Efficiency.** Larger public universities with enhanced pools of researchers may be achieved by providing financial and non-financial incentives for consolidation of small specialized institutes and the public HEIs that are currently exhibiting deteriorating efficiency, effectiveness and quality.

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2. Overview of the Bulgarian higher education sector

2.1. Until 1989 the higher education system in Bulgaria was closely controlled by the communist state, and universities were part of the state apparatus, subject to detailed control and regulation from the center. One of the first acts of the Government following the 1989 changes was to introduce the Autonomy Act, which removed most of the controls under which universities previously worked but did not offer counter measures for university management, particularly regarding the balance between autonomy and accountability.

2.2. Bulgaria’s higher education sector has undergone significant change since then. The elitist system of the past has been transformed into a platform for mass higher education. The emergence and expansion of private HEIs has changed the sector’s size and structure and enhanced the competition among providers. Over the past two decades five large private universities appeared, which, together with 13 smaller private HEIs and colleges and the 33 public universities and HEIs, formed a system of 51 institutions of higher education. Thus, the intake capacity of the sector grew significantly, and currently about 280,000 students are enrolled in tertiary education. The number of higher education students has increased by 16% in the last ten years, while over the same period the number of secondary education graduates dropped by 13%, reflecting the rapid demographic transition in Bulgaria. The net enrollment rate for tertiary education has made impressive gains: over the period 2000-2012 it grew from 26 to 42% of the population aged 19-23 in 2010. A major consequence of the mass participation in tertiary education is the expanded heterogeneity of students, particularly with regard to their skills and learning capacity.

2.3. In 1995, six years after the Autonomy Act, a national agency for quality assurance was established – the National Evaluation and Accreditation Agency (NEAA). Its institutional development was heavily supported by the British Council and university and quality assurance practitioners from the UK. After periods of piloting evaluations and a series of legal amendments, in 2004 the NEAA also became responsible for post-accreditation and evaluation monitoring and oversight. Meanwhile, Bulgaria’s participation in the Bologna process (initiated in 1999) has led to the introduction of the three-stage structure of higher education (bachelor, master and doctor), the institutional reorganization and strengthening of the NEAA, and its membership in the European Association for Quality Assurance in Higher Education (ENQA) and the European Quality Assurance Register (EQAR). Further strides were made in 1999 by revamping the funding model through the introduction of per capita financing of HEIs linked to the number of enrollments. And, in 2000, universal tuition fees were introduced with little opposition, bringing significant changes to the income structure of the HEIs.

2.4. In 2007, Bulgaria joined the European Union (EU). Tertiary education and research are among the key foundations of European integration: through cultivation of skills and knowledge that promote labor mobility, and through participation in the European Higher Education Area (the Bologna process) and the European Research Area, which promote cross-border recognition of the quality of tertiary education credential and research outputs. In that context, the objective to accelerate the social and economic convergence of Bulgaria to EU norms necessitates increased productivity and a labor force equipped with the high-order skills demanded by a rapidly developing knowledge-based economy. Such knowledge-based workers are expected to have tertiary education.

2.5. Despite the quantitative and structural achievements during the past two decades, higher education in Bulgaria continues to face challenges with regard to quality, efficiency, and accountability for results. In addition, Bulgaria has one of the most challenging demographic profiles in the EU and the world, with its population expected to decline by 27% between 2010 and 2060, ultimately decreasing to almost half of its level at the early days of transition. Bulgarian society is ageing fast with the population above working age expected to almost double its share of total population to 33% by 2060 compared to 2010. Most importantly, the population of age 15-24 years is also projected to decline by 41% between 2010 and 2060 which would have direct impact on the tertiary education sector.

2.6. Reducing the convergence gap between Bulgaria and the rest of the EU will require sustained and marked improvements in productivity and a shift to economic activities with higher value-added potential, generated by employees with higher and better skills. Bulgaria’s Europe 2020 agenda and the related
strategic documents adopted by the Bulgarian government (the National Reform Program and the Convergence Program) set the ambitious target of increasing the share of the people aged 30–34 with higher education to 36% by 2020. Against the backdrop of the emerging negative growth in enrollments, the achievement of this objective requires a) greater effort to enroll those left behind in the age range of 24-34, b) improve secondary education participation and completion rates, c) consolidate the sector and optimize the existing intake capacity of tertiary institutions, and d) improve quality and international reputation of Bulgarian higher education and pursue higher number of international students enrollments.

2.7. Recent reform initiatives have started addressing some of the weaknesses. Amendments to the Higher Education Act in 2010 and 2011 allowed HEIs to perform research activities on a contractual basis with state and private users as well as for other HEIs, allowing institutions to become partners with other HEIs (local or international) and organizations. These amendments also introduced new legal grounds for the delivery of joint graduate or PhD programs, including through franchise arrangements. Another major reform related to the funding model has been the gradual reorientation toward a stronger focus on HEIs performance, starting with a small performance awards envelope in 2011, and further enlarged and refined in 2012. This funding reform followed a major undertaking to collect information on educational outcomes and graduate employment in 2010 and 2011 as part of the Bulgarian Universities Ranking System (BURS) initiative. Amendments to the Academic Staff Development Act in 2010 replaced the centralized system for career development of academic staff with a system providing autonomy to HEIs and research institutions to adopt and implement their own staffing policies. In the second half of 2011, legislative amendments laid the foundations for competition on the quality assurance market by allowing ENQA and EQAR member agencies to conduct program evaluations of Bulgarian HEIs, as part of a broader set of revisions of the quality assurance framework in the country. Bulgaria is well-positioned to catch up with the rest of EU countries and bring its tertiary education system up-to-date through follow-up efforts based on the recent reform initiatives. Implementing integrated measures toward increasing the quality, relevance and efficiency of its tertiary education institutions can be achieved by revisiting the models of governance, quality assurance and financing of higher education. Ideally, these elements are central in a long-term vision and strategy for the development of a strong and competitive higher education system, capable of imparting the skills and knowledge required to boost the social and economic prosperity of Bulgaria.
3. Quality assurance

3.1. Countries pursuing policies to achieve economic growth realize that a prerequisite of that growth is having more of their population educated at higher levels, and to certain acceptable standards. Mass participation in tertiary education, which in the case of Bulgaria takes up nearly all secondary school graduates, as well as the growing number of degree granting institutions operating in the country, bring an increased concern about the quality and integrity of the higher education system and its institutions on at least three counts:

- **relevance**: Are higher education institutions offering training and education appropriate to the needs of society?
- **effectiveness**: Are higher education institutions delivering the outputs and outcomes expected by the system’s stakeholders, particularly in terms of the number and characteristics of (skilled) graduates?
- **efficiency**: Are students able to receive a useful and reasonably good quality education in an acceptable time frame? And do institutions and the system as a whole deploy their resources to maximum effect?

3.2. Well-designed quality assurance (QA) systems for higher education assess the quality of study programs, institutions and the broader higher education system in which these units operate. QA ideally encompasses all those attitudes, objects, actions and procedures which, through their existence and use (and together with specific quality control activities) ensure that appropriate academic standards are maintained and enhanced at all appropriate levels. QA should respond effectively to the needs of key stakeholders—governments, students, HEIs, employers, etc—and ensure transparency of processes and results.

3.3 QA framework in Bulgaria: Overview and recent developments

3.3.1 QA in Bulgaria includes elements of the three major approaches to QA:

- **accreditation** (institutional and program);
- **evaluation** (institutional and program), as part of the accreditation process (external), and **internal** (self-evaluation) as part of the quality assurance system of individual HEIs;
- **audit** (post accreditation monitoring and control).

3.3.2. The responsibility for QA in tertiary education lies with the National Evaluation and Accreditation Agency (NEAA). NEAA was founded in 1996, but its present role as the provider of full-fledged institution and program accreditation and post accreditation processes began only in 2005. By law, NEAA is designed as an independent agency under the Council of Ministers to reduce influence from both the policy makers at the central level (MEYS, in particular) and the HEIs subject to evaluation. However, with respect to its budgetary relations with the Government, NEAA is a second level budget spending unit under the MEYS.

3.3.3. Bulgaria’s participation in the Bologna process (1999)—in which QA is a central action line—has led to significant changes in Bulgaria’s tertiary education landscape. Key developments have included the institutional reorganization and strengthening of NEAA, along with its membership in the European Association for Quality Assurance in Higher Education (ENQA) and the European Quality Assurance Register (EQAR). NEAA has had six brisk years of activity since 2005, having accredited all of the existing institutions in the system and their programs by the end of 2010. An external review of NEAA published in 2008\(^2\) indicates that NEAA has demonstrated considerable progress in terms of the establishment of know-how, management, procedures and a firm quality culture, not just among the HEIs, but also inside the agency which, as the report indicates, has contributed to its apparent success.

3.3.4. Accreditation is conferred at two levels in Bulgarian higher education—at the institutional level and at the level of individual study program—based on the results from the evaluations made by NEAA. **Institutional accreditation** involves evaluation of HEIs’ own institutional capacity to maintain and

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implement their QA mechanisms; it evaluates the academic and physical infrastructure capacity of HEIs, and the availability of the facilities required to ensure adequate delivery of teaching and support of research. Program accreditation is based on the evaluation of the HEIs’ capacity to deliver quality teaching and provide adequate research in the specific disciplines or professional fields offered by HEIs.

3.3.5. NEAA has developed detailed procedures governing both institutional and program accreditation, accompanied by lists of criteria against which evaluation teams conduct their assessments. The evaluation framework, the process and procedures, and the lists of criteria used for institutional and program evaluation have been designed to comply with the broadly defined European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). As in many other ENQA and EQAR member states, the criteria for evaluation focuses on a set of general prerequisites for delivery of quality higher education. In Bulgaria, however, criteria for institutional and program evaluation are still dominated by input and process dimensions, rather than outputs and outcomes, and measurement is geared towards quantity than quality. At the end of 2011 NEAA has made substantial revisions to the program and institutional evaluation criteria by increasing the number of criteria assessing quality aspects of education and research activities of HEIs. In addition, a new segment of criteria was introduced, predominantly quality focused, aimed at assessing the competitiveness of evaluated HEIs with respect to their educational and research outcomes. Even with these recent positive developments, the relative weight of the quality focused criteria in the overall institutional and program evaluation scores of HEIs is still low (15%).

3.3.6. The existing model for accreditation and QA pays due attention to the self-evaluation and quality assurance driven by the HEIs. NEAA’s role in this regard is to develop and issue guidelines and general principles for conducting self-evaluations. NEAA also assesses the self-evaluations generated by the HEIs and uses them as a source of information in its accreditation and evaluation work. All HEIs in Bulgaria have developed their own systems for QA, and the few examples of self-evaluation frameworks reviewed for this report were comprehensive, with due attention to inputs, processes, outputs and outcomes, and assessment of risks. Still, the commitment to self-reviewing, as well as the self-evaluation culture of Bulgarian HEIs, varies significantly by institution.

3.3.7. Until mid-2011, the results from the evaluations of NEAA were expressed in a 4-step grading scale – “very good”, “good”, “satisfactory” and “not satisfactory”, whereby NEAA awarded the highest possible accreditation grades of “very good” and “good” to 45 out of the 51 HEIs in Bulgaria. From an international perspective, such minimal variance created doubts about the integrity of evaluation, especially in view of the fact that Bulgarian HEIs have been absent from renowned international rankings, and have not led any of the few joint international research projects with Bulgarian participation. Given the high stakes attached to the accreditation grades, the legislation was amended in 2011 to introduce a 10-step grading scale allowing for greater differentiation across HEIs in Bulgaria.

3.3.8. A major development in the overall QA and performance management framework in Bulgaria was the launch of the Bulgarian Universities Ranking System, comparing equal study programs offered by Bulgarian HEIs against a set of 51 indicators, several of them measuring different aspects of the labor market performance of the graduates: type of employment contract, income, correspondence of the job to the tertiary program from which students graduated, etc. BURS provides readily available, hard and objective data that complement the institutional and program evaluation criteria used by NEAA. Many indicators in BURS are extensions of the criteria used by NEAA, looking to find answers to performance questions that currently NEAA criteria cannot provide; others are similar to those used by NEAA, but defined to produce sharper and stronger measures. Further, the rich information captured by BURS specific to professional fields and HEIs can facilitate NEAA in establishing benchmarks on performance and other aspects of teaching as well as the research functions of Bulgarian HEIs, thus creating a new dimension in the existing evaluation framework and informing the process of institutional and program accreditation grading.
Box 1. Data collection in Bulgarian higher education

The Registry of Tertiary Students in Bulgaria (RTSB). Launched in 2007 by the MEYS, the RTSB covers all students (currently enrolled; those who suspended temporarily their studies; and graduates) in all universities and HEIs (public and private), by professional fields and program studies, and by degree levels (bachelor, master, PhD). This has enabled the MEYS to track students and cohorts as they move through and obtain credits in the higher education system, and to capture all movements and transitions between fields and across universities. The precision of the RTSB allowed MEYS to improve its per capita funding model by replacing the enrollment targets used for calculating subsidies to HEIs with data on actual enrollments in HEIs.

The Registry of Tertiary Graduates (RTG). This database contains detailed information on the higher education graduates in Bulgaria, including scanned copies of the diplomas awarded.

The Bulgarian Universities Ranking System (BURS). Another MEYS initiative, this web-based tool was launched in 2010. BURS does not actually produce an institutional ranking of the universities and HEIs, but rather rates and compares the professional fields offered by the HEIs on a set of criteria. Furthermore, BURS links (through available graduate identifiers) the information on every graduate in Bulgaria in RTSB to the elaborate information contained in the systems of the Bulgarian Social Security Institute (linked to the system of the National Revenue Agency) and the Bulgarian Employment Agency.

The result is that MEYS now obtains hard, objective data for graduates (by program of study, HEI graduated, and year of graduation) on:
- if the graduate found a job
- if the job found corresponds to the field of study
- the employer
- if the labor contract is permanent and full-time
- the threshold used for social security contributions as a proxy for the employment income of graduates

This information is further complemented by hard data existing in the MEYS’ systems, such as the average grades associated with the pre-university diploma completed by tertiary students, to build a fuller profile of students and graduates. In addition to the hard objective data, representative sample-based surveys collect feedback from current students to present dimensions and personal perceptions on the quality of services and teaching offered at HEIs that cannot be captured by the hard data.

3.4. Challenges and options for reforms in quality assurance and accreditation

3.4.1. Challenge 1: Compromised autonomy of NEAA. Although NEAA is designed as an independent agency under the Council of Ministers to reduce influence from both the policy makers at central level (the Ministry of Education Youth and Science, MEYS), NEAA is a second level budget spending unit under the MEYS, while the Ministry of Finance decides on the most important element of NEAA’s revenues – the fee levels for program and institutional evaluations of HEIs.

Further, NEAA’s independence from some HEIs may appear ambiguous, considering the composition of the evaluation committees tasked to implement the accreditation procedures. There is almost total dominance of one key stakeholder group in NEAA’s activities and initiatives; namely, senior academics and university professors. Despite amendments in 2007 aimed at increasing the participation of other stakeholders, the autonomy of the NEAA is problematic because professors from universities and HEIs in Bulgaria heavily dominate the rosters of personnel in the NEAA’s Accreditation Council, the eight Standing Committees (SC), and the Expert Teams that perform the essential function of conducting institutional and program evaluation site visits. The relatively small size of the country, the large number of HEIs, the practice of having most of the academic staff employed simultaneously in more than two universities or HEIs, combined with their dominant presence in all bodies of the NEAA and in the expert teams, provide grounds for conflicts of interest and cast doubts about the integrity of the evaluation process.
3.4.2. **Proposed reform 1: Reduce NEAA’s dependence on the academic staff of public HEIs.** Government of Bulgaria may consider revisiting the current rules and procedures for defining the fees for program and institutional evaluation of HEIs to allow NEAA, and not the Ministry of Finance, to have a say over evaluation fee setting. Further, the financial subordination of the NEAA as a second level budget spending unit under the MEYS may be reconsidered as well.

There is also a need to revise the composition and the terms of reference of the NEAA, such that there is greater representation of relevant external stakeholders, particularly from professional and scientific bodies, as well as industrial unions and among qualified experts from outside the country. Furthermore, the NEAA may:

- undertake a comparative study of other similar agencies in the EU and OECD countries and review the composition and the inclusion of external stakeholders in QA and accreditation agencies with comparable mandates to the NEAA. For example, the evaluation teams in charge of program and institutional and program evaluation of HEIs in the Netherlands and Denmark consist predominantly of international experts.
- strengthen the in-house capacity building and training mechanisms of the NEAA, with a particular focus on strengthening knowledge and skill levels among international experts and students.

3.4.3. **Challenge 2: Inadequate transparency of NEAA.** The NEAA, in keeping with its commitment and responsibility for transparency of its activities, publishes each year in May a list of the accredited universities and HEIs, a list of key academic units, branches and majors of the regulated professions, as well as a list of the accredited scientific majors. However, although the above mentioned accreditation decisions are posted on the NEAA’s website, the accreditation reports are not openly available.

3.4.4. **Proposed Reform 2: Publicize all accreditation reports in full.** NEAA would fully align its standards with the ESG for Quality Assurance in the EHEA by making all accreditation reports available to the public in their entirety.

3.4.5. **Challenge 3: Burdensome design of accreditation.** The legal requirement for NEAA to periodically evaluate and accredit each study program of HEIs and every single specialty for regulated professions and doctoral study programs, places significant pressures on the larger universities with a wider selection of professional fields and study programs. In practice, they undergo seemingly incessant cycles of evaluations and accreditations. This issue has been raised repeatedly by stakeholders in HEIs. In 2011, the NEAA revised its institutional and program evaluation criteria in a bid to provide common ground for future consolidation of bachelor, master and PhD degree program evaluations.

3.4.6. **Proposed reform 3: Simplify accreditation procedures.** NEAA may consider a further simplification of its accreditation procedures by checking whether all the external quality assurance processes it has developed are needed for the fulfillment of its mission. In addition, NEAA may consider the option of merging institutional and program evaluation activities into a single process. Another alternative is to assess the feasibility of limiting the focus of program evaluations only to the broader fields of study offered by HEIs. In any case, such reform measures may result in improved QA only if coupled with parallel reforms in the QA and accountability frameworks (including sharpening of the evaluation criteria); otherwise there is a significant risk that radical simplification of procedures, while reducing the burden to HEIs and the costs for evaluations, could cause more problems than solutions with respect to the rigor and credibility of evaluations.

3.4.7. **Challenge 4: Input and process oriented dimensions still dominate the QA framework.** Although NEAA made important strides in 2011 by revising the system of criteria for institutional and program evaluation and adding a new component assessing the competitiveness of HEIs with respect to their educational and research outcomes, there is room for further improvements. The external evaluation and accreditation criteria set the standards for performance of HEIs, therefore the weaknesses of the framework (less focus on quality) are transferred to the post-accreditation monitoring and control (PAMC) and have direct impact on HEIs and their attitudes towards self-evaluation. Therefore, further sharpening of NEAA’s criteria may have a positive impact on the rigor with which HEIs review their own performance and quality. For example, the criteria list currently counts the number of books in the library and the share
of new volumes, or the physical footprint of the library. However, the criteria list makes no attempt to find out whether the books are current, relevant to the curriculum, or if these reflect the scientific achievements in the respective professional field, nor how are these used by students and if they find them relevant\(^3\). Further, the criteria system still lacks relevant details and specific information about the following attributes related to the components outlined in the framework:

- unambiguous definition of the measurable outcomes for each criterion or objective,
- identification of targets for each identified outcome,
- assessment of the actual institutional reality against the target,
- assessment of the gaps, and
- identification of the initiatives to be taken by the institutions to close performance gaps and achieve desired objectives.

3.4.8. Proposed reform 4: Enhance and expand the output-focused and qualitative criteria for program and institutional accreditation. The wide variety of arrangements for QA across Europe provides good examples of evaluation and accreditation frameworks that, while complying with ESG, also pay significant attention to the results achieved by the HEI and the quality of their outputs (e.g. the Netherlands, Denmark). NEAA may consider further revisions to the lists of criteria, introducing greater breadth and depth in analyzing the qualitative aspects and bringing greater rigor and sharpness to the framework.

3.4.9. For example, NEAA’s criteria for institutional evaluation, while ensuring compliance with ESG, may be enriched by adding dimensions as outlined in the Institutional Accreditation Checklist of State Regulatory Agencies in the USA (see Annex 2). NEAA’s and/or the Government (as part of the BURS initiative) may also consider criteria and indicators similar in spirit to those developed by the European University Association (EUA) in the Reference System for Indicators and Evaluation Procedures, 2004\(^4\) (see Annex 1). The EUA approach focuses on seven specific categories—including such issues as incoming student quality, R&D productivity, resources earmarked for teaching and research, and governance, planning and management—and a total of 36 different indicators. A quick review of definitions in the EUA’s Reference System for Indicators and Evaluation Procedures reveals that Bulgaria has already started collecting information on some of the indicators, as part of the BURS.

3.4.10. Challenge 5: Enforcing the legal provisions for NEAA’s exposure to competition. The issue of NEAA’s monopoly on Bulgaria’s evaluation and QA market has been addressed in recent amendments to the legal framework, whereby ENQA and EQAR member agencies are allowed to conduct program and institutional evaluations, based on HEIs’ requests. The broad formulation of this provision in the Higher Education Act needs to be further elaborated to address two major issues:

- How to ensure problem-free conversion of foreign ENQA and EQAR agencies’ evaluations into accreditation grades using the grading system adopted in Bulgaria, given the variations among different evaluation methodologies and their rigor.
- The discrepancy of evaluation costs between NEAA and foreign agencies. The comparatively low, centrally regulated evaluation fees for NEAA evaluations will likely continue to ensure NEAA’s dominance, providing little ground for competition, at least in terms of price, and almost no room for engaging highly qualified (and more expensive) international experts. Presently, all costs for the optional involvement of foreign experts in NEAA’s evaluations must be covered by the evaluated HEIs, which acts as a natural deterrent for HEIs’ willingness to request foreign experts’ involvement.

3.4.11. Proposed reform 5: Revise the policy on inclusion of prominent foreign experts into NEAA’s evaluations, use EU funds and programs to cover the higher costs for attracting international experts

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\(^3\) Similar dimensions to this particular topic are partially reflected in the methodology used by the Bulgarian University Rankings System

\(^4\) Quality Assurance: A Reference System for Indicators and Evaluation Procedures, By François Tavenas, 2004, Prepared for the ELU (Latin European Universities group)
to the evaluation teams and regulate the principles for conversion of evaluations by foreign ENQA and EQAR members into accreditation grades. As part of the endeavors to open the evaluation market to foreign QA agencies, Government and NEAA need to mandate the participation of renowned foreign experts in NEAA’s evaluations. Their selection (and the selection of local experts) should comply with the following basic criteria:

- Professional experience
- Credible record in research, development and innovation
- Organizational and management experience
- Experience in evaluating higher education
- Confirmed reputation of the institution where the expert works or has worked
- Aptitude for team work, objectivity and confidentiality
- Absence of conflict of interests

3.4.12. The selection of foreign experts by NEAA needs to be geared towards attracting renowned, world class experts and scholars to its evaluation teams, with greater consideration of quality, rigor and impartiality, rather than the costs of evaluations. To keep the costs for evaluations lower while ensuring the participation of world class international experts in NEAA’s site visit evaluation teams, Government and NEAA may use available EU funds – through the operational programs or other EU programs – to cover the costs of international experts’ participation in evaluation procedures. Alternatively, the same EU sources could be used to co-fund the evaluations of foreign agencies (members of ENQA and EQAR) so that costs for evaluations paid by the HEIs are equal to the fees charged by the NEAA. Thus, EU sources could be used for high impact strategic activities which may significantly improve the quality assurance framework in Bulgaria.

3.4.13. **Challenge 6: Sustainability and ownership of the BURS.** An aspect that makes the BURS project particularly promising is that Bulgaria is not undertaking a one-off data collection exercise. However, currently BURS is regarded as a predominantly MEYS-driven initiative. While the maintenance and future update of BURS are ensured by the availability of EU structural funds, failing to ensure a strong sense of ownership of the BURS among the entire higher education community may leave the project’s future vulnerable to the priorities of changing Governments.

3.4.14. **Proposed reform 6: Identify a prominent role and institutionalize the performance data collection triggered by the BURS.** The BURS needs to be managed, maintained and used in a way that ensures strong ownership of BURS by all higher education stakeholders. This is a prerequisite for ensuring the sustainability of the initiative. Further, the data and indicators of BURS relevant for QA need to be integrated and used for improving the existing QA framework, which requires engagement with the main QA player in the country, the NEAA. The Government, the NEAA, the HEIs and the relevant external stakeholders need to resolve the fundamental question of whether all latest developments in performance and quality data collection, triggered by the launch of BURS, should be used to expand and improve NEAA’s own processes and criteria for evaluation, or whether BURS should be kept as a stand-alone performance measurement tool.

3.4.15. **Challenge 7: Using BURS beyond the purposes it was built to serve.** As described earlier, the advent of BURS changed dramatically the volume and diversity of available hard objective data related to the outcomes of tertiary education, especially with regard to labor market performance of tertiary graduates in Bulgaria. However, BURS was designed and developed with the major objective to provide a reliable tool in the hands of prospective tertiary students to make informed choices about study programs and HEIs in Bulgaria. The Government has already used BURS data beyond the original purposes of the tool and attached BURS indicators to the allocation of performance awards to HEIs. This poses two main questions:

- Could the current BURS methodology and indicators appropriately fit a broader range of uses of BURS data?
- Are BURS’ methodologies and design flexible and elaborate enough to produce variations of indicators of sufficient diversity and precision to adequately serve different purposes, while still relying on the input data taken from the systems of the National Social Security Institute and the National Employment agency?
3.4.16. **Proposed reform 7: Expand the current BURS-driven data collection into a comprehensive performance database for the higher education sector.** As a first step, the Government may carefully review the definitions of the indicators and check if the available data from the National Social Security Institute and National Employment Agency can feed even more diverse and sharper indicators. The next step may be to revisit the existing terms of reference for BURS data collection and analysis with the objective to expand these data collection efforts into an institutionalized, comprehensive database, which, through filtering data and producing data queries, could deliver as an output not only the current BURS, but also other data outputs and indicators (e.g. similar to the indicators in EUA’s *Reference System for Indicators and Evaluation Procedure*, or indicators which could be used for the purposes of performance-based funding).

3.4.17. **Challenge 8: Skills of tertiary students are not adequately assessed.** Even with the existence of NEAA’s framework for evaluation and accreditation, and with the launch of BURS that complements NEAA’s evaluations and provides new data on tertiary education outputs, some of the most important performance data on the tertiary education sector is still missing in Bulgaria – the objective and subjective (survey-based) assessment of what students learn, what skills they acquire during the course of their tertiary education studies, and how these correspond to the needs and expectations of employers. This gap in performance data limits the ability of key actors to take informed decisions and improve the quality of the sector.

3.4.18. Presently the tertiary education system in Bulgaria (as in many other developing and advanced countries) cannot tell if students are acquiring the needed competencies, skills and knowledge. It is also unclear where in the system – e.g. by fields of study or by type of university – students are on a particularly steep learning curve, comparatively speaking. In part, such information exists for certain professions where “professional exams” certify that graduates are qualified (teachers, medical doctors, lawyers, etc). However, such assessment is not in place for the fields in which the majority of Bulgarian students study, namely, economics, business, political science, and the humanities.

3.4.19. **Proposed reform 8: Complement the annual BURS-related student surveys with some elements of the full-fledged graduate and employers tracer studies and consider the option for developing, pilot testing and implementing tertiary student assessments.** As part of the BURS, survey-based data are gathered from current students. It is recommended that these surveys be taken to a higher level by either including survey questions for graduates and employers, or alternatively, by implementing a full-fledged graduates and employers “tracer” study. One possibility is to develop a methodology similar to the framework developed by Harald Schomburg and the International Centre for Higher Education Research of the University of Kassel (“Handbook for Graduate Tracer Studies”, October 2003). The tracer study should ideally be designed to cover all graduates, and, similar to the recommendations for the BURS, it should be designed to serve a broader range of objectives than just complementing the data needed specifically for the current specifications of the BURS. To ensure participation, commitment and ownership of HEIs, it is worth exploring the experience of Romania (see Box 2).

**Box 2. Romania’s “University Graduates and the Labor Market” project**

In thinking about its own graduate tracer study interests, Bulgaria may benefit from examining the lessons learned from the implementation of one of Romania’s strategic projects in higher education in 2010, “University Graduates and the Labor Market”, funded by the Romanian EU Operational Program “Human Resources Development” (further information is available at [http://www.absolvent-univ.ro](http://www.absolvent-univ.ro)). A particular strength of the approach used in Romania is the participation of all tertiary education institutions in the project, including the Romanian QA Agency (ARACIS), and all HEIs in the country. The Romanian tracer study is intended to get feedback from all tertiary graduates from two specific years, 2005 (tracing graduates with several years’ employment history) and 2009 (tracing graduates one year after their graduation). Feedback is collected through a survey questionnaire designed to generate objective, standardized information.

A portion of the information thus collected contains data which in Bulgaria is collected as part of the BURS initiative, for example, information on whether graduates (from different study fields or programs, and different universities) find jobs; how long it takes them to find these jobs; what type of jobs are found; the starting salaries. However, alongside these data, the Romanian tracer study collects:
3.4.20. For possible implementation in Bulgaria of a similar type of graduates and employers tracer study, it will be essential to ensure that all universities and HEIs participate, and that all have commitment to and feel ownership of the initiative. It will also be fundamental to ensure that participating HEIs understand that such endeavors will help to improve the information base not only of the Government, but also those needed by HEIs to strengthen their own systems for quality assurance.

3.4.21. Yet another option is to consider the development and piloting of assessment tools for measuring learning and skills of students. At present OECD is developing the first international tool for assessing tertiary education students’ learning – the Assessment of Higher Education Learning Outcomes (AHELO), expected to be launched in 2016. The Government may consider having Bulgaria participate in the OECD’s AHELO project and actively participate in the OECD working group meetings, where the world’s foremost experts on the field brainstorm and discuss pitfalls. Participation in AHELO may transfer to Bulgaria substantial technical expertise in administering and analyzing such test results.

3.4.22. Alternatively, Bulgaria may develop its own tools, in the form of standardized tests. The main purpose of this effort may be to assess the system and provide more information to the stakeholders, without attaching any consequences (i.e., converting it into a sanctioning tool). Developing and piloting such tests may involve, for example, a sample of students in both state and private universities with the objective to measure a number of broad competencies that are usually assumed to be sharpened during the course of tertiary education. The focus may also be both discipline-specific and touch on more cross-cutting competencies, such as “analytical reasoning skills”, “critical thinking skills” and “communication skills”. International examples that have laid groundwork in this area include:

- the Collegiate Learning Assessment in the United States
- the Graduate Skills Assessment in Australia
- the Exame Nacional de Cursos in Brazil
- the Exámenes Generales para el Egreso del Técnico Superior Universitario in Mexico

3.4.23. Annexes 3A, 3B, and 3C provide a list of international examples of initiatives to assess students’ skills and competencies, including a description of the agency behind each test or survey, how the test/survey is being used, and what incentives universities and students have to participate.
4. Governance and management

4.1. Recent trends in governance of higher education in Europe

4.2. Governance in higher education concerns both the internal leadership of institutions as well as the direction of entire systems. Governance is about the articulation of interests of various stakeholders, and the agreement and realization of common goals, and raises fundamental questions about "who" decides "what", "how", and "when" to implement. External governance, on the other hand, refers to the institutional arrangements at the macro- or system level including higher education laws and decrees, funding arrangements, and system and institutional evaluations. Internal governance refers to the institutional arrangements within universities and HEIs such as lines of authority, decision-making processes, financing and staffing. Higher education governance is thus understood as the external and internal coordination of higher education and research. This coordination may have both formal and informal components.

4.3. Trends in governance at system level

4.3.1. The economic crisis, which hit Europe in 2008, has had long-term effects not only in financial terms and with respect to the mechanisms for funding HEIs, but also on aspects of institutional autonomy and accountability. In many countries, governments have applied more direct steering mechanisms and in many cases there has been a significant increase in accountability measures. A major trend in Europe’s higher education landscape is the changing role of the state, as the focus of states shifts from input-based budgeting to outcomes-based relevance. In some countries the state serves as a steering mechanism vis-à-vis the market. The role of the state as a market engineer is central to the notion of market governance. In this governance mode, government interventions are focused on the shaping of a level playing field, which facilitates self-regulation. New steering devices have been introduced throughout Europe—performance-based funding and multi-year agreements with higher education institutions provide illustrative examples. Former state responsibilities—such as quality assessment and leadership decision-making—have not only been transferred to the institutions, but to other organizations such as research councils, funding councils and quality/accreditation agencies. New actors at the national level, such as ministries of economic affairs, are entering the higher education scene, especially given their interest in the emerging knowledge society and technology transfer. In this respect, the state’s role, via ministries of education, has become one of a network manager steering through networks.

4.3.2. The notion of "less government and more governance" is supported by the developments in these key areas:

- **Finances:** Public expenditures for continuously expanding higher education systems are demanding new methods of financing.
- **New market mechanisms:** There is a gradual shift towards the market as a coordinating mechanism. Today in Europe it is evident that higher education increasingly functions in quasi-markets, where governments still play an important guiding role.
- **Globalization:** Globalization, internationalization and Europeanization have all challenged the national boundaries of higher education systems and pose new questions to governments and higher education institutions. The European Union’s framework programs have proved to be an effective instrument for encouraging higher education institutions to engage in large scale partnerships across national boundaries.

4.4. Trends in governance at institutional level

4.4.1. Empirical evidence suggests that the new public management organizational approach has been influential in “modernizing” public services. Some European countries increasingly treat their public education systems as public service providers, using similar methods and principles. This includes the introduction of performance-based funding, the establishment of multi-year agreements, and the emphasis on accountability and transparency.

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5 “As far as higher education is concerned, governance focuses on the rules and mechanisms by which various stakeholders influence decisions, how they are held accountable, and to whom. In the context of higher education, governance refers to ‘the formal and informal exercise of authority under laws, policies and rules that articulate the rights and responsibilities of various actors, including the rules by which they interact.’ In other words, governance encompasses ‘the framework in which an institution pursues its goals, objectives and policies in a coherent and co-ordinated manner’ to answer the questions: ‘Who is in charge, and what are the sources of legitimacy for executive decision-making by different actors?’” Eurydice (2008). *Higher education governance in Europe.* Retrieved 29 January 2012 from http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/091EN.pdf.
service sector organizations as quasi-corporate enterprises with the goal of increasing their efficiency and effectiveness by giving them more autonomy and at the same time asking for more accountability.

4.4.2. **Strengthening the management and oversight capacity of HEIs in Europe:** In parallel to the devolution of authority from the state level, there have been centralization tendencies within higher education institutions when it comes to accountability measures. In many respects de-regulation has become re-regulation at another level within the higher education system. Across the board, the main trend has been the strengthening of higher education institutions as organizations. The considerable increase in the number of mid-level management positions in European higher education institutions may be seen as related to these developments.

4.4.3. **Strengthening leadership capacity in European HEIs:** One of the consequences of reshuffling authorities and responsibilities between the various levels within higher education systems is that many powers have been given to the top level of the institutions. This has often meant a strengthening of institutional leadership, particularly in those higher education systems where, traditionally, the leadership posts were relatively weak. Another trend in this respect is that, instead of being elected, the newly empowered institutional leaders are increasingly being selected and appointed from outside the institution and even from outside academia. Overall, there is a clear general trend of formally strengthening the position of the executive head across Europe.

4.4.4. **Changes in the position and role of the HEIs’ governing bodies:** Another consequence of recalibrating university governance concerns the positions and roles of governing bodies of universities and the extent of external stakeholder representation within them. The composition and role of these ‘top-level bodies’ differ across European institutions, however two key trends include:

- increased representation by external stakeholders
- a shift of power from academic councils/senates to governing boards.

4.4.5. The composition of governing boards ranges from external members only, to a mix of internal and external members. The general purpose of many governing boards is to safeguard the interests of the institution and to ensure that the institution complies with national laws and regulations. Frequently they are involved in appointing the institution's executive head. Examples of such governing boards can be found in Ireland, Cyprus, Sweden, and Norway. In Austria the governing board shares some decision-making powers with the senate. In other countries (such as Denmark, Ireland, Italy or Sweden) the majority of seats on the governing board are taken by external stakeholders, but internal stakeholders participate as well. In Lithuania, Portugal, Slovenia and Norway there is parity or internal stakeholder dominance, where the governing boards combine an external and internal perspective.

4.4.6. **Reforms to the process of selecting HEI leaders:** An important emerging trend is the transmission to boards of trustees of the power to select new rectors. However, there are still various ways used to select executive heads of institutions. The three most common ones are:

- **Appointment by the governing boards of HEIs.** In countries like Denmark, the UK, Netherlands and Austria the executive head is appointed by the governing board or council, which, depending on the institution, may consist exclusively of external stakeholders, or at least have a majority of external members.
- **Election by internal stakeholders.** In countries like Bulgaria, Greece, Slovenia the academic staff, students and administrative staff elect the rector.
- **Appointment by the ministry.** In a number of countries the executive head is appointed by the ministry or the candidate proposed by the institution needs ministerial approval.

4.4.7. **Changes in HEIs’ leadership style and practices:** The strengthening of institutional leadership has also had an impact on leadership styles within institutions. Traditional notions of collegiality and consensus-based decision-making have increasingly come under pressure, making room for “business-like management” and the “professionalization” of administrative structures. Borrowing instruments from the private sector, institutions have tried to enhance their possibilities to streamline the organization in order to cope with an increasingly complex environment. Developing institution-wide polices – always problematic because of higher education institutions’ fragmented character – strategic planning, and ‘identity-building’
are now regarded as essential survival strategies. Higher education institutions are increasingly seen as ‘corporate actors’ that act strategically not only within their own organizations but they also via pro-active engagement with their external environment. A number of countries (or autonomous regions within countries) provide examples of how this can be done. For example, in Denmark, Norway and in Quebec (Canada), the wider tertiary education community is held accountable by university boards that have a majority of outside members and the power to hire and fire the leaders of individual institutions (Fielden 2008, as cited in Salmi 2009). Recent reforms in Lithuania provide another example of the governance of higher education moving in this direction.\(^6\)

4.4.8. A recent survey of the European University Association – “University Autonomy in Europe II: The Scorecard” reviews governance of universities in Europe along institutional, financial, staffing and academic autonomy dimensions, the key findings of which are presented in Annex 5.

4.5. Governance of tertiary education in Bulgaria

4.5.1. In Bulgaria, the responsibility for development and implementation of policies in the higher education sphere lies with the state: the National Assembly (Parliament) adopts the main legislation and policies governing higher education, the Council of Ministers (Government) develops and endorses the policies which are adopted by the parliament, while the Minister of Education is in charge of the implementation of the higher education policies. The institution in charge of determining the institutional and program capacity of HEIs in Bulgaria is the National Evaluation and Accreditation Agency (NEAA). NEAA is an independent structure under the Council of Ministers, tasked with performing program and institutional evaluations and accreditations of HEIs, determining the institutional and intake capacity of the HEIs, and conducting the post accreditation monitoring and control of HEIs. The decision-making process for the opening and closure of HEIs starts with the NEAA through its accreditation procedures then goes through the Minister of Education and the Government and the ultimate decision is made by a Parliamentary vote. The relations between the state and the autonomous HEIs are not mediated by buffer bodies. The common standing and opinion of the HEIs is expressed by the Council of Rectors of HEIs in Bulgaria. The opinion of the students is expressed by the National Representation of the Students Councils in Bulgaria.

4.5.2. The degree of autonomy granted to tertiary institutions in Bulgaria rapidly expanded from 1995 onward, a period that saw (a) less state regulation, (b) more academic self-governance, and (c) greater managerial governance at the university level. The academic and institutional autonomy of HEIs is reinforced by the academic-centered design of the public HEI’s governance model, which unfortunately also ensures that public HEIs are run primarily for the benefit of their faculty. Under the existing legal framework all strategic decisions of the public HEIs concerning academic life, management of resources, control and compliance are in the hands of the HEI’s academic staff, which are excessively represented in all governing and controlling bodies of the institution. The rector is selected and appointed by and reports to the General Assembly, in which at least 70% of the votes come from the academic staff, which the rector is likely to rejoin after having completed his/her term of office. The rector is effectively the Chief Executive, but instead of being accountable to all stakeholders (the taxpayers, their elected representatives, the students, the faculty, staff, and employers) the rector is currently accountable only to the faculty of the university he or she serves. Furthermore, management experience is generally not a major factor upon which appointments are based.

4.5.3. The academic staff dominates entirely the Academic Council, which debates, decides and manages the academic matters within the HEIs. It also appoints the vice-rectors of the HEIs. Internal supervision and control is exerted by the Supervision Council, comprised of internal stakeholders, among which one member represents the students and the rest are academic staff who are not engaged in the other management structures of the HEIs.

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4.5.4. At institutional level, the link between HEIs and the stakeholders who are external to the institution is embodied by the Councils of Trustees, established at each public HEI. It is comprised of seven members; five are nominated by the Rector and voted in by the Academic Council, one member is appointed by the Ministry of Education and one by the Student Councils. The Councils of Trustees were established in 2007 through amendments to the Higher Education Act to represent the broader public interest, but their existence has not affected public HEIs’ performance due to the very limited powers entrusted to the councils. The existing model of governance at institutional level explains, in part, the inefficiencies seen in the management of financial and human resources and the disconnect between HEI policies and labor market needs. It is also one of the factors contributing to the weak relevance of the knowledge and skills produced, as evidenced by the recent data on student employment collected as part of the BURS initiative.

4.5.5. The governance framework in Bulgaria is characterized by a number of contradictions, typical to many EU countries. Public universities in Bulgaria can own assets, but they do not own the majority of their buildings; these belong to the state. Universities receive block grants from the state and enjoy freedom in the allocation of the financial resources they receive from the government. They can also carry money forward from one year to the next. However, the Ministry of Education Youth and Science (MEYS) has retained its power to formally endorse the number of students that public HEIs propose to admit, which ultimately determines the size of the per-capita based subsidy. Public HEIs are free to determine their own tuition fees, but within caps imposed by the central legislation. Admission to HEIs is liberalized, but confined by the institutional capacity defined as a result of the institutional accreditation conducted by the NEAA. Public universities are free to enroll students beyond the state quota and charge full-cost recovery tuition fees, as long as they have been accredited as “very good” or “good”, and as long as this does not exceed a centrally determined threshold of a percentage of their intake capacity.

4.5.6. Like many former communist bloc countries, Bulgaria took the path of providing autonomy and flexibility in financing to HEIs before nascent measures aimed at holding institutions accountable could take hold. For instance, the rapid expansion in enrollment since 1990 occurred when the newly established NEAA was still discovering its mandate and trying to establish its institutional credibility. The autonomy transferred to universities followed a static, traditional management model, instead of mandating increased autonomy accompanied by more “businesslike” and accountable leadership and management at university level.

4.5.7. The understanding of autonomy has been anchored to the notion of independence from the state, but in practice the sector has become somewhat independent from industry, employers, the market, and too dependent on the faculty, staff and the different groups within the institution. Thus, any effort by stakeholders outside public HEIs to reclaim some steering power is regarded as a breach of university autonomy. Against this backdrop, the legal provisions requiring consultations with employers, industry and other stakeholders that are external to the sector seem like a misplaced imposition and result in pro-forma interactions. However, major reforms to the tertiary education sector in Bulgaria to make it more up-to-date are unlikely to succeed unless the institutional governance framework is changed to incorporate a greater openness of HEIs to external stakeholders and a stronger accountability framework.

4.5.8. At present, there is no comprehensive strategic statement or document presenting the long term vision and objectives for the future development of tertiary education in Bulgaria, and outlining how governance, financing and quality assurance of higher education should interact to successfully accomplish these objectives.

4.6. Challenges and options for reforms in the governance and management of HEIs

4.6.1. Challenge 1: Bulgaria’s limited declared strategic priorities in higher education. The tertiary education sector in Bulgaria has been growing without strategic direction. The lack of a strategy has become even more conspicuous after Bulgaria’s accession to the European Union, when key priorities of Europe in the field of research, student mobility, and innovation have been reflected in various governmental decisions and programs, the National Reform Program, a separate strategy for research, and a lifelong learning strategy, but not in a comprehensive strategic document outlining the vision for the future direction of Bulgarian higher education, its governance, financing, and priorities. The plan to embed
the vision for the sector within the future edition of the Lifelong learning strategy is likely to change the focus and the context in which tertiary education is examined, thus touching upon the issues of governance, quality assurance and funding only marginally.

4.6.2. **Proposed reform 1:** MEYS should initiate and conduct a vision development and strategic planning exercise for the higher education system as a whole with the participation of all relevant stakeholders. Individual institutions should likewise be encouraged and incentivized to do the same at the institutional level. Although more applicable at the institutional level, a Harvard University-developed methodology for strategic planning known as the “Balanced Score Card BSC” does provide useful insight into the identification and perspectives of key stakeholders at the level where national vision development for higher education would take place. The stakeholders in a national strategic planning for higher education include all the individuals and groups who have an interest in the higher education system and its institutions. Their areas of interest are outlined in Table 1 below.

<table>
<thead>
<tr>
<th>Table 1. Stakeholders and their interest in higher education</th>
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<tr>
<td><strong>Stakeholders</strong></td>
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<td>Faculty and staff of universities and HEIs</td>
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<td>The Central Government and the Ministry of Finance</td>
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<td>The key Ministry in charge of higher education</td>
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<td>Other ministries involved in HR development</td>
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<td>National and regional R&amp;D funding councils</td>
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<td>Publicly funded R&amp;D organizations</td>
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<td>Employers and their associations</td>
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<td>Professional associations</td>
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<tr>
<td>Civil society organizations</td>
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4.6.3. At the institutional level, the BSC’s primary purpose is to translate the organization’s strategic objectives into a portfolio of projects in order to achieve a set of goals defined by performance indicators. The BSC’s essential tenet is the underlying “balanced” view that it brings to the strategic planning process, by virtue of attention paid to stakeholder perspectives, the perspectives from the internal business and management processes of the organizations involved, and the critical knowledge and financial resources that must be leveraged for meaningful action. (See Annex 4 for more detail on the BSC.)

4.6.4. Challenge 2: The lack of balance in the composition of governing bodies and accountability in the governance of Bulgarian public universities and HEIs. Discussions on reforming the management of universities have so far been limited to the role of the rector within the context of possible delineation of academic oversight versus the economic/financial management of universities. Revisiting the role of the rector without addressing the roles and responsibilities of the other governing bodies is likely to create more tensions than long-lasting benefits for the sound management of universities. Bulgarian universities and HEIs are governed exclusively for the benefit of their faculty, as evidenced by such key details as:

- The head of the institution (the rector) is selected by the General Assembly which consists mainly of internal stakeholders, and in which 70% are representatives of the academic teaching staff of the institution.
- The rector comes from the teaching staff ranks, and will likely return to those ranks at the end of his/her term in office.
- The Academic Council, which makes decisions about academic matters for the institution, has no external stakeholders to provide input that can contribute to increasing the societal and business relevance of university programs.
- The Supervision Council of the institution, which has no external members, is essentially a body with limited authority.
- The Council of Trustees at each university/HEI lacks decision-making powers, although by composition and design these bodies could constitute a decision-making body that could significantly open HEIs to external stakeholders.

4.6.5. Proposed reform 2: Change the model of public HEIs’ governance by establishing Governing Boards. The government should consider changing the organization, composition and mandate of the Council of Trustees from their present status to the status of “Governing Boards” of the public HEIs. Government should also define the new relationship between the rectors, as heads of HEIs, and the proposed new boards. It is worth examining the recent experience in the majority of European countries of reforming management of universities and ensuring greater participation of external stakeholders.

4.6.6. As a first step, the Government needs to reconsider the powers of the Council of Trustees and empower them with significant strategic decision-making authority. Their current composition needs to be revised, as well. The Governing Boards might consist of 15-25 members (depending on the size of the institution), with two-thirds (or at least half) of the members being representatives of the key external stakeholders expressing the interests of civil society, employers and their associations, industry, and the state. The other third (or, at most, half) of the members should be elected by all the relevant internal stakeholders in the university or HEI, including teaching faculty, administrative staff, and alumni.

4.6.7. The Chair of the Governing Board may be (a) selected independently by the board members or (b) appointed by the government or the president from the roster of appointed members.

4.6.8. The Governing Board should govern the affairs of the university/tertiary institution by:

- developing broad administrative and management policies for the institution;
- providing broad direction and coordination to the development of academic programs in relation to the HEI’s strategic plan;
- approving the budget and overseeing the efficient management of funds, property, facilities, and investments; and
- appointing the rector, as chief executive of the institution.
4.6.9. Having a strong governing board does not preclude the university from having a strong academic senate to debate academic matters. However, reforms in management need to make universities accountable to external stakeholders by widening external representation within the management structures. The institutional governance reforms must ensure that universities are managed by qualified managers, and that the existing “self-sufficient” design of university governance is discontinued.
5. Financing and Efficiency

5.1. Higher Education funding in Bulgaria in the context of the European Union

5.2. Level of funding

5.2.1 The higher education systems in Europe have undergone a decade of underfunded expansion, a trend mirrored in Bulgaria. Public funding limitations in Europe have been especially evident in light of the imposition of post crisis austerity measures in recent years. Notably, average public funding in the 27 member countries of the EU (EU27) stands at 1.14% of GDP, notably lower than USA, where the significant private resources invested in American universities are complemented by state support of 1.26% of GDP.

5.2.2 The austerity measures in Bulgaria have affected all budget sectors, however the education sector as whole appear to have taken the brunt of budget constraints. This is evidenced by the significant downward transition of the sector’s budget support as a share of GDP, starting from a pre-crisis level of 4.6% (2008) and falling to 3.2% in 2011 and 3.4% in 2012. Against the backdrop of shrinking GDP share for the entire education sector, the tertiary education has fared relatively well. The 30% increase of funding for tertiary education over the past five years in Bulgaria surpassed the rate of increase of enrollments (14%). Nonetheless, the per student public funding of tertiary education remains very low by international standards. Public funding (as a percentage of GDP) of higher education has been unstable over the last 10 years, decreasing gradually from 0.82% of GDP in 2001 to 0.68% in 2007, regaining sharply to 0.89% in 2009, and dropping to 0.87% in 2010. Even taking the peak value of 2009 for comparison with the rest of the EU countries, Bulgaria ranks extremely low; it stands on par with the UK, where private resources play a significant role in tertiary education. Most importantly, Bulgaria’s level of public spending is also lower than most of its regional peers and the countries in which the higher education sector is similarly dependent on public funding.

Figure 1. Total public funding of higher education as a share of GDP, 2008

Source: Eurostat, data retrieved March 2012

5.2.3 When private HEIs are included in the assessment of funding levels in Bulgaria and compared to the other EU member states (controlling for purchasing power), the public and private funds spent per student in Bulgaria are the lowest, on par with Poland (Figure 2). When controlling for GDP per capita, however, the same indicator shows the opposite picture – Bulgaria ranks among the countries with the highest per capita spending on private and public HEIs, relative to the GDP per capita (Figure 3). This reversal is partly driven by the inclusion of private HEIs in the calculation (for which the state does not provide budget support) and the relatively large size of private resources (e.g. tuition fees) invested by individuals into (private) tertiary education, compared to the low level of GDP per capita.
5.3. Resource mobilization

5.3.1 In tackling the major challenge of mobilizing more resources to sustain expanded tertiary education access, policies adopted in many European countries reflect the significant social and private
benefits of higher education, hence the tendency of the growing share of private sources of funding at the expense of budget support. The rationale for having greater private contribution at tertiary level compared to pre-university levels stems from the higher private benefits from tertiary education to graduates, in the form of higher-than-average lifelong learning and income opportunities, and much lower unemployment rates.

5.3.2 The financial framework of higher education in Bulgaria reflects the global and European tendency for diversification of resource mobilization. Resources for tertiary education in Bulgaria consist of:

- **Public funds** (subsidies from the state budget, 60-65% of the pool of resources for public HEIs). Public money goes to public HEIs only, apart from the indirect support of the Government by virtue of the state guarantee for the student loans scheme, which is open for attendance at private HEIs, as well.
- **EU structural and cohesion funds**, used to support (a) strategic projects like the development of the Bulgarian University Ranking System, and (b) projects providing equity support by means of scholarship to students, as well as projects addressing the relevance of skills by funding internships and practical training.
- **Private sources** in the form of own source revenues of HEIs from tuition fees and, to a lesser extent, income from grants and projects from abroad, income from property and consulting services, and private resources from commercial banks through the student loan scheme effective since 2010.

5.3.3 Public contributions

5.3.3.1. The state subsidies have always constituted the prevailing part of public HEIs’ income, around 60% in 2010. Table 2 provides an overview of the actual amounts and attendant percentages for these subsidies in 2010.

<table>
<thead>
<tr>
<th>Table 2. Subsidies to public HEIs in Bulgaria, 2010</th>
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<tr>
<td><strong>Subsidies</strong> (total)</td>
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<td>BGN, millions</td>
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<tr>
<td>Share in total subsidies</td>
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<td>Share in HEIs total income</td>
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<td>Share in GDP</td>
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Source: Budgets of the public HEIs, 2010 (Ministry of Education, Youth and Science web site)

5.3.3.2. Specifically, the system of state subsidies for public universities in Bulgaria is comprised of four main elements:

- **Core subsidy (79% share of total state transfers, 2010)**. This is a capitation block grant, based on enrollment targets proposed by HEIs and endorsed by the Government, and adjusted to reflect the actual distribution of enrollments across universities and HEIs. The subsidy contributes toward salaries and recurrent expenditures of HEIs.
- **Science subsidy (2.8% share of total state transfers, 2010)**. This is a project-based target subsidy ensuring the basic needs of HEIs for conducting research, producing publications, printing textbooks and scientific research reports. Allocations are made across all HEIs in installments (50:30:20% portions, disbursed at three points in the fiscal year). The size of allocation depends on the approved projects and the performance of individual HEIs with respect to the use of the science subsidy they received in the previous year, as well as the implementation of the approved projects in the current fiscal year.
- **Social subsidy (14.3% share of total state transfers, 2010)**. This is a target subsidy for the social expenditure of students, including scholarships and dormitories. The size is determined annually in proportion to the number of students enrolled in HEIs. Actual allocation of scholarship funds to

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7 Performance-based transfers were introduced in 2011 and cannot be reflected in the table with 2010 data
students is determined by each HEI, but central regulations require that awarding is both means-tested and merit-based.

- **Capital subsidy (3.3% share of total state transfers, 2010)**. The capital subsidy is a target subsidy covering the capital investment needs of HEIs. It is not based on a predefined allocation mechanism. The share of the capital subsidy from the total pool of state transfers a HEI receives varies by institution from 2 to 8%.

5.3.4. **Private contributions**

5.3.4.1. In Bulgaria, there has been an upward tendency in the share of private contributions to the pool of total funds for tertiary education. It is best manifested in the increased share of own source revenues of public HEIs, particularly robust since 2008 (rising from 33% of public HEIs’ income that year to 41% in 2010, or an increase of BGN 35 million in absolute terms over this period). Figure 3 reveals that, at system level, the income from tuition fees plays a dominant role in the own source revenues of public HEIs.

**Figure 3. Composition of public HEIs’ own source revenues, 2010**

![Pie chart showing the composition of public HEIs’ own source revenues, 2010.](image)

*Source: Consolidated State Budget, Execution report, 2010 (Ministry of Finance), and budget execution reports of the public HEIs (Ministry of Education, Youth and Science web site)*

5.3.4.2. **Tuition fees**: It is reasonable and justifiable if individuals who benefit from higher education share some of the burden of the cost of education, at least in proportion to the private benefit. Most European countries have come to accept that the beneficiaries of higher education have to contribute a ‘fair share’ to the cost of their education through tuition fees, and not expect this service to be fully subsidized by the state. Box 3 provides some insight into key trends in this area. Having beneficiaries pay for a meaningful part of the cost of education tends to increase the vigilance of students and their parents to the quality and relevance of the education delivered (implying stronger accountability of universities to their students), it affects the commitment of students to their studies (reducing the “opportunistic” participation in tertiary education), and reduces the burden on the state budget.
Box 3. Tuition fees across Europe

In 2005, out of the EU25 member states at that time, 15 had tuition fees in their HEIs; in 2008 (with Bulgaria and Romania already members, and both having tuition fees arrangements in place), this number increased to 18.

A recent survey across HEIs in Europe conducted by EUA shows there are significant variations across countries with respect to the share of income from tuition fees, ranging from 0% (Norway) to more significant shares in Spain (13%), Latvia (16%) or even larger in England (25%). On average, the private contribution to the budgets of HEIs in OECD countries reaches 35-40%, (including USA, Canada, and Australia which traditionally impose higher levels of tuition fees) with tuition fees representing two thirds of this share.

The distinction between home and international student populations with regards to tuition fees has become increasingly common throughout Europe, with only a few countries not specifically charging international students tuition fees. In Sweden, such fees were introduced in 2011 for non EU/EEA students, with universities free to set the fee levels on the basis of full cost coverage. In Finland, the government has initiated a “trial period” until 2014 during which universities will be free to charge higher fees to non-EU/EEA students in master level courses taught in foreign languages. In the Netherlands, where fees charged to national and EU students are limited by a ceiling set by the government (1,672 EUR/year for bachelor and master studies for 2010-2011), the cap on fees for non-EU/EEA students was lifted in 2006 and universities can now set their own fees (these fees can range from 6,000 EUR/year to 32,000 EUR/year at the bachelor level). Since 2010, Dutch universities have also been allowed by the government to charge higher fees for students wishing to study for a second bachelor degree.

Source: “Financially Sustainable Universities”, EUA, 2011

5.3.4.3. Tuition fees were first introduced in Bulgaria in 2000 and accepted with little opposition. They are relatively low by European and Bulgarian standards and even their recent increase has not been a deterrent to enrollment expansion. In Bulgaria, tuition fees are charged to all students at all degree levels, both for the state quota subsidized places and outside of this framework, with only a few legally defined exemptions. The specific fee levels are decided by each HEI (and endorsed by the MEYS) with caps determined in the Higher Education Act and expressed as a percentage of the centrally determined per student cost standard for each professional field of tertiary education.

5.3.4.4. By law, all students from the state quota are charged at levels not exceeding two-thirds of the per student expenditure norm (used for calculation of the core subsidy) for the specific professional field. This percentage has been frequently revised to reflect the dwindling state support in the wake of the financial and economic crisis after 2009. It was initially pegged at 30%, then raised to 50% then to two-thirds of the expenditure norm. Thus, currently tuition fees range from as low as BGN 300 (roughly EUR 150) per year for the inexpensive fields of study (usually set by the public HEIs at the maximum allowed rate of two thirds of the expenditure norm for the respective field of study) to around BGN 1,000 per year for the more expensive programs (set by the HEIs at an average of 11-12% of the expenditure norms for the relevant professional fields).

5.3.4.5. With respect to the students enrolled outside of the state quota subsidized places, only public HEIs with “good” and “very good” accreditation grades, and the HEIs with PhD programs assessed and accredited as “very good”, can enroll and impose tuition fees, with tuition rates nearing the point of full cost recovery. In addition, there is a legally set limit for the number of students enrolled outside the state quota (and paying larger fees), which should be no more than 5% of the state quota students. Furthermore, the total number of students should not exceed the capacity of the HEI as determined by the NEAA via its institutional and program accreditation decisions. Bulgarian students and students from EU/EEA are treated equally as long as the language of instruction of the programs in which they are enrolled is Bulgarian.

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8 Exemptions include enrolled students who are orphans, disabled in acts of war, students in defense academies, and PhD students in their last 2 years of research.
5.3.4.6. **Student loans:** To ensure that the tuition fees do not adversely affect access to university education, many countries across Europe and elsewhere have established student loans or introduced tax benefit legislation. In Bulgaria, the need to support students’ participation in tertiary education (and their ability to cover their tuition fee expenses) was addressed by the Government by effectively launching a *student loan scheme* in 2010. The state guarantee of BGN 40 million (doubled to BGN 80 million for the 2011-2012 academic year) and the participation of three commercial banks made available significant lending resources for full-time students in both state and private universities in Bulgaria. All student loans are financed and disbursed by the three participating private commercial banks. Universities are not involved in any way in loan origination and repayment; their role is confined to providing the required assurance to the banks that the students requesting loans are enrolled full-time.

5.3.4.7. Loans boast the lowest possible interest rate (7%) on the market, with no additional costs, and a grace period for interest and principal repayment as long as one year after graduation. The loans are fixed-term, with annuity repayment spanning a 10-year period. The student loan scheme, however, has almost exclusive focus on tuition fees, which the lending banks transfer directly to the HEIs, while loans for living expenses are available only for full-time tertiary students with children (natural or adopted). In its first year of existence, the scheme provided roughly 4,800 student loans (out of 285,000 students enrolled in tertiary education in 2010) in the amount of BGN 20.8 million. Beneficiaries were both students enrolled in the more expensive study programs of the state universities (medicine, dental medicine, etc.) and students from private universities, where tuition fees are higher.

5.3.4.8. **Other private contributions:** These include the income of HEIs from projects awarded internationally, resource mobilization from industry and philanthropists, earnings from property, consultancy, industrial property rights, copyright and other related rights. Individually, most of these activities yield negligible results when considered against Bulgarian HEIs’ total income, apart from the income earned from property (which represented 6% of own source revenues and 3% of total HEIs’ income in 2010) and income from projects awarded by international institutions, including the EU (6.4% of own source revenues in 2010).

### 5.4. Allocation of public resources

5.4.1. As shown in Table 2, the majority of public funds for HEIs are channeled through a general purpose capitation grant, linked entirely to enrollments. The rest of the subsidies are targeted in nature, allocated on transparent criteria, based on an agreed methodology. An exception is the subsidy for capital expenditures, which is based on annual needs assessments. Annex 6 gives a more detailed description of the formulas used to calculate these subsidies.

5.4.2. A specific feature of Bulgarian HEIs’ funding is the very low share of funds for science and research, by international and European standards. The level of funding allocated to research, development and innovation (RDI) programs and initiatives in Bulgaria is the second lowest in the EU27 countries and amounts to 0.48% of the country’s GDP, as outlined in Figure 4.

**Figure 4. RDI funding for HEIs in Bulgaria**

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<tr>
<th>Level of RDI Funding</th>
<th>Percentage Allocation of RDI Funding</th>
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<tr>
<td>Universities</td>
<td>Universities</td>
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<td>State Organizations</td>
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<tr>
<td>Private Sector</td>
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![Graph showing RDI funding for HEIs in Bulgaria](image-url)
5.4.3. Furthermore, the proportion of RDI funding allocated to universities and HEIs is the lowest in all the EU27 countries, while the proportion allocated to state organizations such as the Bulgarian Academy of Sciences (BAS) is the highest. The dominant role of BAS in science, technology and research reflects its history as a main research institution in the country and owner of the bulk of the public research infrastructure. Scientific production is highly concentrated in terms of institutions and geography: the top five institutions—all of which are in Sofia—produce almost three quarters of the country’s total publications. The Bulgarian Academy of Sciences remains the most fertile institution, responsible for over half the Bulgarian publications in ISI recorded journals, followed by Sofia University “St. Kliment Ohridski” (13%), the Medical University Sofia (5%), the University of Chemical Technologies and Metallurgy (4%) and the Medical Academy Sofia (3%).

5.4.4. Until 2011, the Bulgarian subsidy system for tertiary education was characterized by lack of any performance and policy orientation, with funding allocations driven almost exclusively by enrollments - the Government simply divided the number of student places among universities irrespective of their reputation and the quality and relevance of their programs, providing little incentives to improve the learning environment and the services to students. In sharp contrast, there have been significant innovations in funding allocations across Europe over the last decade, where governments have been using financing as a main steering tool to stimulate better educational and research outcomes from the HEIs. Box 4 (below) provides some sense of the European landscape on this issue.

Box 4. Performance indicators used for funding tertiary education in European countries

With regard to output measures used in allocation formulas in countries across Europe, wider use is made of performance indicators like the number of (bachelor and master) degrees, credits earned, graduation rates, success in winning competitive research grants, academic publications, and research evaluation outcomes.

In the Danish system, for example, the teaching allocation (which on average makes up one third of the revenues of universities) is directly linked to the number of students who pass their exams. In the Dutch funding system, the universities’ teaching allocation is 50% based on numbers of degrees, and for its universities of applied sciences, graduation rates affect funding. In the research budget, performance elements such as master diplomas and PhD degrees are partly driving the funds per institution.

While the funding of teaching activities in the Czech Republic is mostly input oriented (number of students, etc), output criteria such as the number of graduates have recently been introduced. In the German states, funding is a mixture of input and output-oriented allocation mechanisms, employing both performance indicators and performance target agreements.

Based historically on an input system (number of students), the Italian funding system nowadays is also partially based on output criteria related to research performance (through the introduction of a research evaluation exercise). The Norwegian funding system allocates funds according to a formula based on a combination of a fixed component (60%) and components driven by results in education (25% based on students’ credits and graduate numbers) and research (15% based on a mix of the following performance indicators: doctoral degrees, EU funding, research council funding and the number of publications).

In Sweden funding for teaching is based on a mix of input elements (full-time equivalent student load) and outputs (student achievements in terms of credits). In addition to input measures (e.g. staff positions), research funding is increasingly tied to performance (publications/citations, competitive research funding) and strategic considerations.

Source: “Funding Higher Education: A view Across Europe”, ESMU 2010

5.4.5. In 2011, however, the Government decided to set aside a budget of BGN 10 million (or 3% share of the total subsidy pool) to address existing inefficiencies in the sector by supporting structural adjustments and reorganization of public HEIs, including internal mergers or closures of faculties or departments (1% share of total subsidy pool) and to provide incentives to the best performing faculties of HEIs, for which funds amounting to 2% of the total subsidy pool were set aside and allocated (see Box 5 for a fuller description of such performance-based transfers). This effort represents a major breakthrough in
the fiscal relationship between the government and the public HEIs, with potential for further expansion. In 2012, this initiative received a further boost by increasing (albeit modestly) the pool for performance awards while significantly improving the key performance indicators (KPI) used for allocation of the performance awards across HEIs.

5.4.6. The development of KPIs based on objective hard data became possible with the launch of BURS\textsuperscript{9} in 2010 and its ability to produce comprehensive information on a number of performance and quality dimensions. The Government designed the performance incentives scheme to award the faculties of the top performing professional fields offered by the HEIs, based on the seven performance indicators measuring the quality of teaching and the labor market performance of graduates.

5.4.7. In the 2011 edition of the performance awards package, the ranking of HEIs against these indicators is made in each of the 51 professional fields of higher education, and the top two ranking universities for each professional field receive a top-up to the core subsidy for the respective professional field. Most top ranking professional fields are awarded with a 5% top-up to their core subsidy. The top ranking HEIs in the professional fields "Science, Mathematics and Informatics", "Engineering", "Agricultural Sciences and Veterinary Medicine" receive a 10% top-up to the portion of the core subsidy related to these professional fields (reflecting the declared economic development priorities of Bulgaria). The professional fields offered by only one HEI are eligible for a 10% top-up as well, provided the key performance indicators meet predefined eligibility thresholds.

<table>
<thead>
<tr>
<th>Box 5. Performance-based transfers to Bulgarian universities (2011)</th>
</tr>
</thead>
</table>
| These transfers represent a 3% share of the 2011 pool of state transfers and were introduced in June 2011 with a total envelope of BGN 10 million in the program budget of MEYS. The Higher Education Act was recently amended to clearly define the performance awards as part of the state budget envelope for HEIs. For the academic year 2011-2012, the MEYS package of performance incentives is split into performance and structural reorganization components:

- **Performance component (BGN 6.7 million)** uses seven performance indicators generated by the BURS to rank and award the top two HEIs in each of the 51 professional fields of higher education. The indicators used for ranking HEIs' programs are meant to measure the quality of education and the labor market performance of the graduates (with each indicator’s weight shown in parentheses):
  - Accreditation grade (30%)
  - Citation index (h-index) (7%)
  - PhD student programs in the professional field (8%)
  - Average score on secondary education diploma of entrants in the professional field (10%)
  - Average income of graduates (15%)
  - Unemployment among graduates (15%)
  - Employment relevant to the professional field from which students graduated (15%)

- **Structural reorganization component (BGN 3.3 million)** supports HEI projects for merging, consolidating or closings structural units (departments, chair, faculty) by grants not exceeding BGN 0.35 million. In addition it provides funds to HEIs to cover fully or partially the severance payments incurred by the termination of employment contracts with redundant academic staff in the cases not covered by the grants for mergers and closures. In case the total amount of funding requested by HEIs exceeds the total budget, allocations are made proportionally across all applicant HEIs.

*Source: Decree of the Government of Bulgaria #168, 2011*

5.5. **Efficiency and resource utilization**

5.5.1. At institutional level, a striking feature of HEI spending is the dominance of teaching faculty salaries and the costs for basic maintenance and upkeep. This spending pattern reflects, in part, the overall underfunding in the system, but also the overstaffing and/or over-teaching at some HEIs. Even taking as

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\textsuperscript{9} BURS stands for Bulgarian Universities Rating System (see previous section on quality assurance and performance management for more information).
examples some of the most research-intensive universities in Bulgaria, with high student to staff ratios, their spending pattern, as shown in Table 4, is self-explanatory:

Table 3. Composition of recurrent expenditures of three Bulgarian universities, 2007-2009

<table>
<thead>
<tr>
<th>Expenditure category</th>
<th>Sofia University “St. Kliment Ohridski”</th>
<th>Technical University - Sofia</th>
<th>University of National and World Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff salaries</td>
<td>31%</td>
<td>33%</td>
<td>33%</td>
</tr>
<tr>
<td>Staff bonuses</td>
<td>10%</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Staff social security</td>
<td>8%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Upkeep</td>
<td>33%</td>
<td>26%</td>
<td>26%</td>
</tr>
<tr>
<td>R&amp;D and library books</td>
<td>6%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Budget execution reports of the public HEIs (Ministry of Education, Youth and Science web site)

5.5.2. At system level, a main feature is the comparatively large number of HEIs, especially in view of the size of the country: 51 HEIs serve the tertiary education needs of 280,000 students. Thus, the average university in Bulgaria has around 5,500 students. In addition, there is a pronounced prevalence of small, specialized public HEIs. Many sector-specific institutes established before 1989 have followed a strategy of gradual transformation to universities and HEIs by adding inexpensive programs of high demand and attracting professors from larger institutions in a bid to diversify their offerings and earn the status of “universities”. In essence, they still remain specialized institutes, and for some of them diversification has become a survival strategy in the face of diminishing demand for the core programs they offer. This is a concern from a fiscal, research and development, and governance point of view.

5.5.3. In Bulgaria, the ratio of students to the academic staff for the entire higher education system is 15, slightly below the average of 16.4 for the OECD countries. While this would appear to be a favorable standing, it masks significant variations between public and private HEIs, and among the HEIs within the two groups. The average ratio in private universities was 31 students per faculty staff in 2010, with variation within the group from 2 to 117 students per academic staff. The average ratio for state-funded HEIs was nearly three times lower (12.9:1 in 2010), ranging from 3:1 (medical universities) to 38:1 (business and economic universities). While the low ratio for some of the HEIs is explained by the intensity required for offering the programs (medical universities, arts academies), it is worrying that there are sizeable differences in the ratio among public universities with similar programs and orientation, pointing to cases of overstaffing and fiscal inefficiencies which the system has not fully addressed. This affects some of the universities located in the regional centers of Bulgaria, where the long-standing tradition of having a university has been widely perceived as an asset for the respective region. However, the low student to academic staff ratio of the small specialized public HEIs and some universities fosters spending inefficiencies in the sector. Moreover, the small, single-discipline HEIs are unlikely to gain the critical mass of researchers, usually across disciplines, needed to achieve the declared objective of the government to make universities the key players in the research and innovation scene.

5.5.4. Annex 7 provides an overview of student numbers, faculty numbers, and student-faculty ratios for Bulgaria’s public and private universities in the years 2006-2007 and 2010-2011.

5.5.5. The years of quantitative expansion of the Bulgarian tertiary sector have created a large intake capacity which, until the 2010-2011 academic year, was matched by growing demand. Now the trend is reversing, and the sector is set to face years of falling demand. The rapid demographic transition Bulgaria has been going through over the last 15 years has reduced the size of the school-aged population and triggered the school optimization reforms of 2007 and 2008, whereby over 500 schools were closed. Now, the issue of a decreasing youth population has reached the doors of Bulgarian higher education institutions (see Table 5).
Table 4. Growth of enrolments in higher education in Bulgaria

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth in total enrollments</td>
<td>4%</td>
<td>2%</td>
<td>7%</td>
<td>2%</td>
<td>4%</td>
<td>5%</td>
<td>-1%</td>
</tr>
</tbody>
</table>

*Source: National Statistics Institute, data retrieved March 2012*

5.5.6. Most importantly, the education system appears to perform sub-optimally in terms of enrolling and retaining the students at pre-university level, as evidenced by the decreasing net enrollment rates (see Table. 6)

Table 5. Net enrolment rate, by stages of education, 2004-2005 vs 2010-2011

<table>
<thead>
<tr>
<th>Stages of education</th>
<th>2004/05</th>
<th>2010/11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary education (I - IV grade, ISCED - 1)</td>
<td>99.7%</td>
<td>91.5%</td>
</tr>
<tr>
<td>Lower secondary education (V - VIII grade, ISCED - 2A)</td>
<td>84.2%</td>
<td>80.6%</td>
</tr>
<tr>
<td>Upper secondary education (IX - XIII grade, ISCED - 3A, 3C)</td>
<td>77.3%</td>
<td>80.3%</td>
</tr>
<tr>
<td>Post secondary non-tertiary education (ISCED - 4C)</td>
<td>0.3%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

*Source: National Statistics Institute, data retrieved March 2012*

5.5.7. This suggests significant future pressures on the entire education sector’s budget (public and private) should Bulgaria meet the EU targets for access and participation in tertiary education with due attention to quality and relevance. Achieving the target of 40% of the population aged 30-34 with a tertiary education qualification by 2020 implies additional resources will be needed by the entire education system to simultaneously (a) increase the secondary education participation and graduation rates to produce more eligible entrants to tertiary levels, (b) ensure the availability of resources needed to maintain the pool of tertiary education entrants, (c) provide extra equity-focused resources to address the challenges of the uneven skills and socio-economic background among current and future students, and (d) improve quality and relevance of tertiary education.

5.5.8. Urgent measures are required to ensure that the tertiary education sector achieves better efficiency, its structures are optimized, and resources are better utilized. Additional investments complementing the resources freed as a result of efficiency gains in the future should be used exclusively to target quality improvement and relevance of higher education.

5.6. Challenges and options for reforms in the financing of HEIs in Bulgaria

5.6.1. Challenge 1: Large number of small specialized public HEIs. The large number of small, specialized public HEIs is a concern from a fiscal, research and development, and governance point of view. Small HEIs are unlikely to gain the critical mass of researchers, usually across disciplines, needed to achieve the declared objective of the government to make universities key players in the research and innovation scene. Moreover, the low student to academic staff ratio of these small public HEIs fosters spending inefficiencies in the sector.

5.6.2. Proposed reform 1: Encourage consolidation of universities and tertiary institutions. The government may consider and provide financial and non-financial incentives for merging some universities into larger institutions or creating a smaller number of comprehensive universities with larger average enrollment than at present. One option is to steer the tertiary sector, in the short to medium run, towards such consolidation through appropriate changes to the financing allocation mechanisms, e.g. further differentiate funding based on HEIs’ performance. The challenge anticipated in considering the consolidation or merger of universities is a classic example of change management negatively affecting strong vested interests. Hence, it would require fully defined and committed policy foundations and capable change managers using fair and transparent criteria. The benefits of such consolidations or mergers would need to be articulated to all affected parties, especially the concerned university faculty and rectors. China and Hungary provide examples of successful mergers of such institutes through bold government action, despite considerable opposition from the universities. The Hungarian reforms of 1996 (see Box 6) managed to consolidate (by 2007) around 70 specialized public institutions into 30 larger comprehensive public universities.
Box 6. Clustering of small specialized institutions: The Hungarian experience

Hungary was one of the first central European countries to make the transition in the 1990s from a socialist, centrally-planned economy to a market economy, and for a variety of reasons (including history of governmental flexibility, and relative political freedom) Hungary was more prepared than most of its neighbors to make this transition. In the early 1990s the system of higher education consisted of 66 state institutions enrolling approximately 110,000 students and a handful of private and religious institutions enrolling fewer than 1,000 students. The 1993 law on higher education and the subsequent amendments to the law in 1996 and 1999 allowed the government to reduce the number of public institutions by clustering them into more coherent entities. It also allowed for an increase in the number of private and religious institutions, in the process expanding enrolment in higher education four-fold, from slightly over 100,000 students in 1990-1991 to over 400,000 in 2006-2007, as outlined in the table below.


<table>
<thead>
<tr>
<th>Year</th>
<th>State Institutions</th>
<th>Private and Religious Institutions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Institutions</td>
<td>Enrollment</td>
<td>Institutions</td>
</tr>
<tr>
<td>1990-1991</td>
<td>66</td>
<td>107,607</td>
<td>11</td>
</tr>
<tr>
<td>1998-1999</td>
<td>55</td>
<td>243,077</td>
<td>34</td>
</tr>
<tr>
<td>2006-2007</td>
<td>31</td>
<td>359,758</td>
<td>40</td>
</tr>
</tbody>
</table>

5.6.3. **Challenge 2: Underfunding of higher education in Bulgaria.** By international and European standards, public funding of tertiary education is low, as a share of GDP and in terms of per student spending controlling for purchasing power parity. The objectives to improve quality and equity in addition to meeting the access and participation targets set out in the Lisbon and Europe 2020 strategies require the mobilization of additional resources, both public and private, should the Government be set on meeting these objectives within the envisioned timeframe. In addition, the tertiary education sector in Bulgaria is confronted by two major challenges: (a) containing the worrying tendency of brain-drain and (b) the underpaid, “moonlighting” of academic staff, along with the related unattractiveness of academic and research work to young and promising graduates. To address these challenges, more and better targeted resources will be required to ensure decent remuneration of well performing academic staff, along with higher enrollments and graduation rates. **Subject to addressing the efficiency problems in the system, public investments in higher education need to grow, as a high-quality tertiary education system is likely to be a well-funded one.**

5.6.4. **Proposed reform 2: Increase public funding to 1% of GDP in the medium run with an agreed ceiling on public contribution of 60-65% of the total funds, within a broader reform of higher education funding.** The Ministry of Finance and MEYS, in discussion with all relevant stakeholders, should work to reach a consensus on the global balance between the public and private contributions. So far, the public contribution has been within the range of 60-65%, on par with the average for the OECD countries, and this level should be maintained in the future. Increasing the public money for the sector should go hand in hand with reforms that enhance the performance and strategic orientation of funding while addressing the existing inefficiencies observed among the public HEIs. (Each of these topics is addressed separately in the challenges and proposed reforms that follow below.)

5.6.5. **Challenge 3: Suboptimal performance of the student loans scheme.** The current arrangements for student loans make the scheme’s administration simple and efficient. However, while the scheme is too new to assess if its design will ensure problem-free repayments, it clearly lacks sufficient buffers against potential unemployment shocks among borrowers in the future. Also, with the share of student loans granted as low as 1.7% of the total number of tertiary students in Bulgaria, the scheme remains largely unpopular with students. The main reasons are the affordable tuition fees for the inexpensive programs, into which most Bulgarian students enroll, and the design specifications of the scheme, which significantly narrow the use of loans for the living expenses of the students.

The results from the first year of operation seem suboptimal, if one considers (a) the huge potential of student loans schemes to attract resources to the system in volumes which the state budget alone cannot
provide, and (b) the intrinsic power of such schemes to enhance students’ drive for performance and attention to their study, while ensuring their everyday needs. It is likely that in the years to come the application of the scheme will produce similar results, unless the scheme is re-designed.

5.6.6. **Proposed reform 3: Enhance the scope and attractiveness of the student loans scheme.** As a first step the Government may reconsider the eligibility criteria for the loans covering living expenses and expand eligibility to all enrolled full-time students (as is the case with the loans covering tuition fees). Accordingly, the Student Loans Act should be revised and the state guarantee for the student loans scheme increased to allow for a significant increase of the lending resources.

5.6.7. To enhance the program’s attractiveness, the Government may consider a transition to an income-contingent loan (ICL) scheme. This would imply changes to the current administration arrangement, as ICL requires, in addition to a state guarantee, the involvement of the National Revenue Agency (NRA). Through NRA’s participation, the repayment of the loan could be transformed into a component of the graduate's income tax, which is forwarded by the taxation authority to the lending institution. There are two advantages of the ICL versus the current fixed-term loan scheme:

- The borrower pays (upon completion of his/her studies and securing a job) a fixed percentage (x%) of his/her current income on a monthly basis, until the loan is fully paid.
- Risk of default during periods of unemployment of the graduate is mitigated by the ICL’s built-in insurance against the borrower's inability to pay - the loan is carried over to a time ahead when the borrower is again employed and is able to make the loan payments. In addition, repayment of loans may be ensured even in periods of unemployment, through the unemployment benefits scheme, if the unemployed had contributed previously to the social security system.

5.6.8. **Challenge 4: Student scholarships do not adequately affect performance of students.** Government and universities in Bulgaria use the funds provided through the state subsidy and the EU structural funds for scholarships (both means-tested and merit-based) to improve equity and incentivize students’ performance. Currently, this scheme co-exists with the student loans, but neither instrument is used to steer students’ choices and performance according to the priorities of the Government with respect to needed skills and the demand for a qualified workforce in priority economic sectors.

5.6.9. The weak points of the current semester-based scholarship program are that (a) the performance threshold used for awarding scholarships is too low and, related, the awarded amounts are too small to
satisfy the basic living costs of students (a student loan providing means for living costs may do better in this respect), and (b) it narrows the focus of students to simply obtaining the required semester grades to qualify for scholarships, rather than fostering longer-term planning connected to future employability and competitiveness after graduation (again, a student loan may have greater impact in this respect).

5.6.10. **Proposed reform 4: Consider refocusing the state budget and EU funded scholarship scheme in parallel to expanding the student loans.** By expanding access to and eligibility for student loans covering both tuition fees and living costs, the Government can ensure the availability of significant non-budget resources for improving equity and access to tertiary education. With this in mind, the current scholarships scheme may be refocused to a smaller scholarship fund rewarding only outstanding performance and achievement of low-income students enrolled in selected professional fields deemed essential for the future economic development of the country. Thus, the issue of the co-existence of the student loans and the student scholarships may be resolved. Moreover, a sizeable share of the budget and EU resources used for scholarships may be used to attract the most talented into pedagogy programs (which currently suffers extremely low interest against the backdrop of aging teachers, declining quality of secondary education and increasing shortages of teachers in a number of subjects) and/or be re-channeled for other strategic priorities of the sector – for example, covering the higher costs of inclusion of world class experts into the evaluation teams of the NEAA as part of the institutional and program accreditation of Bulgarian HEIs.

5.6.11. If student loans expand significantly in the future, Bulgaria may explore the experiences of the Netherlands, Norway, Sweden, USA and Canada with different forms of loan forgiveness and loan-to-grant conversion, whereby a portion of the loan or its full amount (for tuition fees or fees and living costs) is forgiven if the borrower satisfies predefined conditions. In the Netherlands, Norway and Sweden, loans that students initially borrow are converted to grants if students demonstrate high academic results, graduate or achieve predefined performance targets. Another form of loan forgiveness is employed in USA and Canada where the state forgives all or a portion of repayments for borrowers likely to earn lower income in public service positions, for example in education or public health, particularly in underserved geographic areas.

5.6.12. **Challenge 5: Inflexible arrangements for setting tuition fees.** Under the current legislation, any reduction to the core subsidy by lowering the per student expenditure norm (which happened in 2010) automatically reduces the tuition fees amounts that can be charged (and therefore public HEIs’ income), unless the main legislation is amended by Parliament to increase the tuition fee caps.

5.6.13. Further, tuition fees for non-Bulgarian, non-EU/EEA students are disproportionately higher, ranging from EUR 2,000 to EUR 8,350, affecting, inter-alia, a number of non-EU countries in the region which used to be major suppliers of international students to Bulgaria. The same high fees are imposed on students (including EU and EEA countries) enrolled in programs in which the language of instruction is not Bulgarian.

5.6.14. **Proposed reform 5: Reconsider the rules for setting tuition fees.** In line with the suggested increase of the public funds for higher education, private contributions and own source revenues of HEIs need to grow, should their 35-40% share be kept. This implies, but does not mandate, future pressures for increases of tuition fees. To make fee setting arrangements more flexible the Government may choose among many possible options, including:

- Deregulating fee setting altogether while ensuring all HEIs, public and private, publicize their tuition fees.
- Untying fees from the per student expenditure norms (e.g. replacing them, at least partially, with other factors that may be used as tuition fee determinants), composing a list of minimum and maximum allowed tuition fees differentiated by study programs and degrees, and granting discretion to universities to set the specific levels and define exemptions according to their priorities and needs; or
- Replacing the centrally determined ceilings for tuition fees with a broader range of minimum and maximum allowed levels, e.g. minimum 30% and maximum 80% of the per student expenditure
norms, granting wider discretion to universities to set the specific levels and define exemptions according to their priorities and needs;

5.6.15. Further, the tuition fees for non-EU/EEA students need to be reconsidered and made more competitive, if this segment of potential international students is deemed important for Bulgarian universities.

5.6.16. **Challenge 6: Limited role of HEI’s performance in the allocation of funds.** Until recently, funding of HEIs was almost exclusively based on the number of students enrolled, without adequate relation to performance objectives or educational outcomes (such as the number of graduates achieving a pre-defined performance standard). Despite recent initiatives for reform, most notably the introduction of key performance indicators (KPIs), the existing funding arrangements are not likely to have significant impact on HEI policies nor spur a system-wide drive for better performance, since performance allocations to HEIs are still a small proportion of the overall budget (even with the latest increase of the performance envelope for 2012) and are dispersed among too many programs and faculties of HEIs. A conceptual weakness of the current KPIs approach is that it awards past performance instead of creating incentives for all HEIs to improve performance in the near future, (e.g. through performance-based contracts with HEIs).

5.6.17. **Proposed reform 6: As immediate next step, further increase the share of the performance-based component in the funding of public HEIs, and revise the drivers of the core funding in the medium to long run.** The government needs to carefully review the KPIs used for performance awards and check regularly their impact and validity. In the short and medium run, the government could consider increasing the share of the performance-based component in the total funding of HEIs first to 10% and then gradually, over a five-year period, increase the share of performance funding to 20-30% combined with the introduction of multiannual, forward looking, performance contracts (see 5.6.18). If the quality assurance framework improves and greater rigor is introduced into learning outcomes assessment, the government may explore the option to base a portion of the core funding formula on the number of graduates meeting pre-defined criteria (as in the Netherlands) instead of funding only the the number of enrollments. This reform may be rolled out gradually in parallel with improvements of the learning assessment of students. Subsequent increases of the graduates’ component may take place as the system adjusts itself to the changed determinants of funding. In this process, due attention should be paid to develop strong buffers against possible unintended consequences (e.g. loosening the rigor of student assessment to ensure graduation of students).

5.6.18. **Challenge 7: Inadequate strategic policy focus in financing HEIs.** Public resources for higher education institutions have not been used adequately to steer longer term, strategic policy reforms. The planning and allocation of state subsidies to HEIs is not yet fully aligned with the outcomes or labor market demands despite the recent innovation marked by the launch of the BURS and the small performance awards of the government’s Decrees 168 and 121.

5.6.19. **Proposed reform 7: Introduce performance contracts with HEIs.** In the short run, the Government should strengthen the internal capacity of the MEYS to effectively handle the introduction and implementation of performance contracts with the public HEIs. Performance contracts should be outside of the core funding for HEIs. The performance contracts need to combine top-down and bottom-up approaches to defining performance targets for the future, based on central government priorities for tertiary education and HEIs’ response to these in their individual target setting. Under the performance contracts, targets are defined ex-ante for a certain period of time (e.g. three or four years). Awards are granted ex-post, conditional on HEIs reaching clearly defined, measurable, ambitious, but achievable results.

5.6.20. Maintaining a ratio of the public to private funds of public universities of 60-65:40-35, or the program of the government encouraging structural reorganization of HEIs (envisioned in Government Decree 168, 2011) are just examples of possible objectives that could be pursued through such multi-year performance contracts with relevant HEIs. In the medium run, the funds allocated through performance contract may be increased to reach a 15% share of the total pool of state support to HEIs. The required funds may come from restructuring and optimization of the existing streams of state subsidies, from EU
structural funds, or through additional support from the budget, if fiscal realities permit. Annex 8 provides a brief overview of national experiences with performance contracts in seven different European countries.

5.6.2.1. Additionally, the Government may consider providing *matching grants* to HEIs to encourage HEI’s mobilization of resources from industry and philanthropists.
ANNEXES
Annex 1. European University Association Reference System for Indicators and Evaluation Procedures

Quality of incoming students
1. **Marks on admission:** Given the diversity of national education systems, this indicator uses a standardized form in which students’ marks are used to categorize incoming students by percentile in their reference group.
2. **Social origin of students:** An indicator that provides a profile of the level of social diversity and thus, to some extent, of the cultural diversity of the institution’s student body.
3. **The proportion of students from outside the natural catchment area:** This indicator is an excellent measure of the attractiveness of an institution and, therefore, of its perceived quality.
4. **Admission rates:** The relation between the number of students actually enrolled in a particular university program and the number of enrolment applicants for the same program is a good indication of the selectivity of the latter and, thus, of the quality of enrolled students.
5. **Enrolment rates:** The enrolment rate, is the ratio between the number of students enrolled and the number of places formally offered. It is a sound guide to quality and attractiveness especially in the case of university programs with controlled admissions procedures (*numerus clausus)*.

Performance of students and graduates
1. **Student retention rate in the first year:** The retention rate at the end of the first year is a good indicator of the quality of a program and the instructions an institution offers its students for institutions that admit students after the end of secondary education.
2. **Measures for the integration and supervision of new students:** Where national legislation or practice obliges institutions to unconditionally admit all students who satisfy the minimum qualification requirements, retention rates at the end of the first year are strongly influenced by whether or not there are special program for the integration and educational supervision of new students who are the least prepared.
3. **The graduation rate:** The graduation rate is typically applied to measure the “productivity” of university programs. Use of this indicator requires considerable caution.
4. **Average time to graduation:** The average time students take to complete courses is a good indicator of the learning support they receive, particularly at the postgraduate and research stage.
5. **Rate of transfer to employment after graduation:** The rate of transfer to employment reflects the relevance of the particular course, the quality of its graduates and the reputation of the institution.
6. **The average research contract grant per teacher:** Contractual research activities are a reliable indicator of the level of involvement of a particular university or unit in this commitment to supporting social and economic development. Naturally, substantial variations are to be expected in this indicator from one field of research to the next, as well as from one country to the next, depending on local practice and how the economy is structured.

Level of research activity
1. **Proportion of teachers actively engaged in research:** The proportion of teachers actively engaged in research is a reliable indicator of the level of its research involvement.
2. **The student/teacher ratio in doctoral programs:** An indicator of the research orientation of the university and should normally relate solely to teachers with full tenure and full-time students.
3. **The level of research funding/teacher ratio:** The relevance of this indicator is dependent on national research funding mechanisms. It is especially helpful in a system where research is financed on the basis of grants obtained by individual researchers or teams following competitions adjudicated by panels of peers.
4. **The number, or proportion of full-time researchers:** For a university or unit within an institution, the number of full-time researchers is a good indicator of the level of research activity in the field under consideration. The proportion of such researchers among the teaching staff of the unit is a good indicator of the intensity of research.
Productivity of research and development (R&D) activities

1. **The doctorate/teacher ratio:** This indicator (based on fluctuating averages over a three-year period) that provides a good idea of the effectiveness of research-based training.

2. **The publications/teacher ratio:** An indicator for measuring research output taking into consideration the wide variety of practice in different fields of research, such as articles in an academic journal with an editorial selection committee, conference papers approved by a selection committee, and monographs.

3. **The Citation Index:** The information produced by the ISI claims to measure the impact of publications. The methodological problems associated with these indexes are now well known. They include very imbalanced coverage of subject area, relatively little coverage of periodicals in languages other than English, an overweighing of articles that describe experimental methods, a lack of distinction between favorable and critical references to an article.

4. **The number of patents/teacher ratio:** This indicator is relevant to fields of research whose findings may be patented, which essentially infers pure and applied sciences, and certain branches of health sciences.

5. **R & D prizes and honors:** This indicator is a measure of the number of prizes and honorary awards received over a one-year period, and reflects not only the quality of the researchers concerned, but also reflects their ability, and that of their institution, to effectively lobby organizations that award such distinctions.

Indicators of the level of resources earmarked for teaching and research

1. **The student/teacher ratio:** The ratio between enrolled students and their teachers is a sound indicator of the level of resources and the effective level of supervision in teaching programs.

2. **The student auxiliary teaching staff ratio:** Auxiliary teaching staff plays an important part in supervising students. However, those who make up this category and their precise tasks vary widely from one country and institution to the next.

3. **The technical and support staff/teacher ratio:** The number of the part-time lecturers with and without an academic rank assures the capacity required at submitting the request for accreditation.

4. **The operating budget/student ratio:** This indicator information on cost of education and may, by means of comparison, be used as an indicator of the relative efficiency of university institutions.

5. **The material resources/student ratio:** This indicator of the level of resources able to support teachers is important in pure and applied sciences, health sciences and, more generally, in research programs to which laboratory activities make an important contribution.

Planning and Governance Indicators

1. **The make-up of decision-making bodies:** The presence, number and method of appointing representatives of teachers, staff, students, graduates or socio-economic interests to the administrative board, the senate, or study and research committees.

2. **The diversity of sources of financing:** The diversity of sources of financing and their relative significance is a sound overall indicator of the performance of a university and its ability access to public grant allocation student tuition fees, research funding, research contracts with private or public organizations, and donations by private individuals or organizations.

3. **Mechanisms for the recognition of students’ participation:** Student participation in policy-making bodies and life of universities in general is an aspect of their education, which may be important from the standpoint of simultaneously producing fully educated citizens and subject specialists.

4. **Institutional planning mechanisms:** An indicator of the capacity of the institution to mobilize all sectors of its community and be supported by partners from outside the institution, including representatives of the regional or national socio-economic community who may contribute to formulating an overall institutional planning strategy.

5. **The openness of universities to their surrounding environment:** This dimension may be described by a number of indicators: (i) the number of instances in which universities are involved in local joint activity; (ii) the number of teaching staff involved in such activity; (iii) the number of local businesses established as a direct result of research, (iv) the role of the university, with medical faculty, in the provision of regional health services, and (v) the contributions of artistic and cultural programs to the cultural life of the region; and (vi) the contribution of the university to adult education in the region.
6. *The international outlook of the university and its openness to the world at large*: Indicators of a modern university openness to the world at large include: (i) internationalization of key programs, (ii) support for student and teachers mobility programs, and (iii) support for joint international research initiatives.

**Institutional management indicators**
1. *Rate of academic staff turnover*: The turnover rate of academic staff, and mainly the teaching staff, provides a good indicator of the attractiveness of an institution and the quality of its professional environment.

2. *Mechanisms for allocating budgetary resources*: Indicator of the capacity of a university for selective resource allocation in order to distribute resources in accordance with the strategic development aims adopted by university authorities.

3. *Mechanisms for the development of inter-disciplinary programs*: Indicators of the capacity of the institutions to develop interdisciplinary programs and the level of inter-disciplinary activity in the case of both teaching, including the number of programs with interdisciplinary components, the number of teachers involved in interdisciplinary activities, and the number of inter-disciplinary research centres.

4. *The quality of teaching and evaluation policies and practices*: Indicators of institutional policies for evaluating class provision and teachers, which involve evaluation by students and constructive arrangements for monitoring teachers whose performance calls for improvement, policies for the evaluation of courses with the help of external experts in the discipline concerned, and policies for evaluating their academic units, which focus on the entire range of teaching and research, as well as the administrative functioning of particular units.

**Institutional academic flexibility and adaptability**: Indicators of institutional adaptability include the number of newly devised programs, the number of programs that are discontinued or substantially modified on an annual basis, and the average time it takes to establish new programs

*Source: European University Association* ([http://www.eua.be](http://www.eua.be))
Annex 2. Institutional Accreditation Checklist of State Regulatory Agencies in the USA

The Check List for Institutional Accreditation includes 15 areas:

1. Mission & Integrity
2. Planning & Institutional Effectiveness
3. Governance
4. Organization
5. Administration & Fiscal Responsibility
6. Recruitment & Admissions
7. Financial Aid & Standards of Satisfactory Academic Progress
8. Curriculum & Program Development
9. Instruction & Faculty
10. Student Learning Outcomes
11. Library, Learning Resources & Academic Support Services
12. Student & Career Services
13. Publications & Advertising
14. Physical Plant & Education Facilities
15. Engagement & Community Service

Mission & Integrity
1. Is your current mission statement up-to-date and consistent with the programs currently offered? When and how was mission statement last reviewed by all constituencies?
2. Does your mission statement appear in its entirety in your catalog?
3. Does your mission statement indicate the institution's purpose(s)?
4. Does your mission statement include supporting objectives that are measurable?
5. Does your mission statement clearly articulate the institution's commitments?
6. When and how did you last assess whether or not the institution is achieving its mission?

Planning & Institutional Effectiveness
1. Do you have a current strategic or long-range institutional plan?
2. When was the plan developed and last reviewed?
3. Does your plan meet the prescribed elements of your regulators?
4. Is there documentation to support that the plan has been implemented? Give examples of documentation.
5. Is there documentation of progress reports? What type? How frequent?
6. Is there documentation that the plan has been evaluated on at least an annual basis? What type?

Governance
1. Is the governance, control, and organization of your institution appropriately stated in your current catalog and any other publications?
2. Does the composition of your governing board meet the minimum requirements set by your regulators?
3. During the past year, has your governing board met with the frequency prescribed in the board's by-laws?
4. Are the minutes of all governing board meetings available?
5. Have the elections and terms of governing board members corresponded to the procedures described in the board's by-laws?
6. Is the governing board carrying out the duties and responsibilities described in the board's by-laws, including fiduciary responsibilities?
7. Does the board operate independently from ownership control (corporate or proprietary)?

Organization
1. Do all employees clearly understand their duties and responsibilities and to whom they report?

This Compliance Guide addresses the general, institutional, and programmatic accreditation standards required by both national and regional accrediting agencies as well as state regulatory agencies in the USA. Although the Compliance Guide is designed as a checklist, the institution should be able to demonstrate evidence of each item. This is a general guide, and it is recommended that each institution review this guide against the specific standards and regulations of the institution's accrediting agencies and state authorizing agencies.

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2. Are the duties, responsibilities, and the organization structure formally explained to all employees?
3. Are current job descriptions available for all employees at the institution?
4. Do employees understand the mission of the institution and how their work relates to this mission?
5. Do employees have a mechanism for input into administrative decisions?
6. Does the institution promote an environment that supports academic freedom?
7. Does the institution have the ability to attract and retain good employees?
8. Has the institution established appropriate grievance policies and procedures for all employees and students?

Administration & Fiscal Responsibility
1. Is the institution's president qualified in terms of formal education and previous experience, as prescribed by your regulators?
2. Is there a designated chief academic officer responsible for academic programs and faculty performance that meets or exceeds the qualifications imposed by your regulators?
3. Does the institution have on file appropriate evidence of credentials and degrees of all administrative staff members?
4. Does the institution maintain a current and permanent record (transcript) of each student's academic progress (either hard copy or electronic)?
5. Is the grading system fully explained and consistent on the student transcript?
6. How and for how long are student records maintained?
7. Does the student file contain appropriate information to meet specific regulatory standards, such as evidence of admission, matriculation, credit evaluation for graduation, and final transcript, as well as proof of I-20, and immunization?
8. Are records and reports housed so they are safe from theft, fire, or other possible loss?
9. Does the institution have an outside financial audit conducted on an annual basis?
10. Are annual budget created and monitored on a monthly basis? Is the institution meeting budgeting expectation in terms of both revenue and expenditures?
11. Has the institution had deficit years? Where has it made up the deficit?

Recruitment & Admissions
1. Is the institution's admissions policy and procedures fully disclosed in the catalog and all recruitment materials?
2. Is the admissions policy in compliance with regulatory standards?
3. Does the admissions policy reflect the stated mission of the institution?
4. Does the institution have evidence that it practices its stated admissions policy?
5. Does the institution maintain adequate records which reflect the basis for the admission of each student?
6. Does documentation exist explaining the basis for denials of admission?
7. Are the institution's recruitment methods and procedures in compliance with your regulators' standards (DOE, State, and Accreditation)?
8. Does the institution have a policy and procedures for the awarding of transfer credit from other educational institutions?
9. Does the institution use only "employees" to conduct recruiting activities?
10. Does your institution use third-party agents for recruiting prospective students in the United States, its territories, or its possessions?
11. Does you institution ensure that its recruiters do not make false or misleading statements about the institution, its personnel, its programs, or its services? How is this monitored?
12. Are all recruiters/admissions representatives properly licensed, registered, and/or bonded in compliance with the laws of the states in which they conduct their activities?
13. Are admissions decisions made by an Admission Committee or by an Admissions officer(s) knowledgeable of the institution and its programs?
14. Are all financial aid decisions made by employees not involved with admissions recruiting?
15. Do all enrollment agreements include all items required by your regulators (DOE, State, and Accreditation)?
Financial Aid and Standards of Satisfactory Academic Progress

1. Does your institution offer scholarships?
2. If yes, are scholarships awarded on the basis of competition using past or potential evidence of scholarship as the basis of the award?
3. If yes, does the catalog contain the scholarship and institutional grant and loan information that are required by your regulators' standards?
4. Do the financial records of the student clearly show the charges for tuition and fees, the payments and dates of payments, and the balance due after each payment?
5. Are the tuition, fees, and other charges consistent for all students who enrolled at the same time?
6. Is the refund policy (procedures and formulas) clearly stated in the catalog and schedule?
7. Are the refund procedures in compliance with your regulators' minimum refund standards?
8. Is the refund procedure practiced by the institution, including the issuance of refunds, within the established time limits?
9. Is your financial aid officer(s) appropriately qualified by education and experience in compliance with your regulators' standards?
10. Does your financial aid officer stay current on regulation and policy changes in financial aid by attending training sessions?
11. Does our financial aid officer hold membership in appropriate professional organizations related to Federal Financial Aid Programs?
12. What is your default rate on student loans and is it within acceptable guidelines?
13. Does the institution publish its measure of student progress in it catalog?
14. Does the measure of Satisfactory Academic Progress include time frame, grades, definitions of successful course completion and minimum standards?
15. Does the measure of Satisfactory Academic Progress include warning-probation process, appeals procedure, mitigating or special circumstances, and a reinstatement policy?
16. Does the institution enforce its Satisfactory Academic Progress Policy?
17. Are there adequate procedures to monitor the consistent enforcement of the institution's satisfactory academic progress policy?

Curriculum & Program Development

1. Is documentation from your accrediting agency and state agencies available to confirm the approval of each program offered?
2. Are the educational programs offered by the institution consistent with its published mission?
3. Do the education programs have clearly articulated and measurable student outcomes?
4. Are the education programs consistent with the needs of your students? How and how often is this measured?
5. Is there evidence to support that your educational programs are meeting the occupational or career objectives of your students? How and how often is this measured?
6. Is there evidence to support that your education programs are meeting the needs of the community? How and how often is this measured?
7. If applicable, do your educational programs provide students the necessary skills to obtain licensure, certification, or registry necessary to practice in a specific occupational or professional area?
8. Does the institution offer advanced standing to students who enroll with skills or knowledge normally provided by the educational program(s)?
9. Do you have a Program Advisory Committee, experienced in the program area, to ensure the currency and relevancy of the Program to meet market demand?
10. Do your Program Advisory committees meet as often as required by your regulators or by-laws?
11. Are minutes of each Advisory committee meeting maintained and do those minutes very that the Committee performs the duties and responsibilities required by your regulators?
12. Is there evidence that in each program offered, there is a well-organized sequence of appropriate subjects leading to the satisfaction or occupational objectives and/or the acquisition of an academic credential?
13. Are program faculty involved in the systematic review and revision of curriculum? How and how often is this done?
14. Is there a detailed syllabus with measurable learning objectives on file for each course listed in the catalog?
15. Are the program lengths appropriate to the subject matter taught?
16. Are the program lengths appropriate to the credential awarded and meets the hours required by your regulators?
17. For undergraduate degree programs, do you offer the depth and breath of general education courses required by your regulators? Are these general education courses transferable?
18. Are all courses identified and offered as general education courses, in fact, general education courses?
19. Are the course in the catalog appropriately numbered, identified, with prerequisites clearly indicated?
20. Does the catalog explain, the course numbering system?

**Instruction & Faculty**
1. Are the instructional methods appropriate to the subject matter and to the students in each course?
2. Are the instructional materials appropriate to the subject matter and to the students in each course?
3. Does the size and holdings (including access to online) of the Library support instruction and meet the needs of students and faculty? How and how often is this measured?
4. Is the quantity and type of instructional material and equipment proportionate to the size of the institution and the nature of the programs?
5. Is the institution in compliance with federal copyright laws in the use of instructional materials, including computer software licenses?
6. Do faculty members have the academic credentials and/or experience to teach in their respective content area? Is the following documentation in their faculty file:
   - Application or Data Sheet
   - Job Description/Assignment Letter/Contract
   - Current Curriculum Vita or Resume
   - All official higher education transcripts (from CHEA recognized accredited institutions);
   - All foreign transcripts with foreign credential evaluation; certificates/diplomas, licenses.
   - Faculty Student Course Evaluation Summaries.
   - Faculty Development Ð Annual Summary and Plan
   - Faculty Performance Review Ð Annual
   - Documentation of Tenure and Promotion.
7. Are teaching faculty evaluated on a regular basis against identified and published criteria? Course evaluations? Peer Evaluations? Post-tenure reviews?
8. Are class observations used in the evaluation of faculty members?
9. Do you have a faculty handbook that is reviewed by all faculty?

**Student Learning Outcomes**
1. Does the institution have an assessment plan that calls for the systematic collection of assessment data that is reviewed regularly?
2. Are the learning outcomes of the program linked to the mission and purposes of the institution?
3. Are the objectives of each course in a program of study linked to the program outcomes?
4. In what multiple ways is student learning measured? At the course level, at the general education level, at the program level, at the institutional level, and the community/employer level?
5. How is this data regularly collected, analyzed, summarized, and used to improve institutional effectiveness?
6. In what ways are students, faculty, staff, administration, alumni, advisory boards, employers, and other constituencies involved in this process?
7. Is your institution providing the quality of education as demonstrated by student learning outcomes to aid students in reaching their goals as indicated in your mission statement?

**Library, Learning Resources & Academic Support Services**
1. Does the institution have appropriate instructional resources to support education programs?
2. Does the institution have appropriate equipment to support its educational program?
3. Are the equipment and resources up to date and current with today's technology requirements?
4. Are the quantity and quality of the library holdings appropriate for the type and size of the institution?
5. In the library, are appropriate reference materials and periodicals available in hard or electronic copy?
6. Are the instructional resources organized for easy access, usage, and preservation?
7. Does your librarian(s) meet the qualifications required by your regulators?
8. Is the librarian(s) competent to both use and aid in the use of the technologies and resources available in the library?
9. Is the librarian(s) involved in consortia and has a personal development plan.
10. Does the library have a development and/or acquisition plan?
11. Does the institution provide an adequate, annual budget for the purchase of library resources and equipment?
12. Does the library provide study and reading facilities necessary for an effective education program?
13. Does the institution provide academic support and accommodation for students with learning disabilities?

Student & Career Services
1. Is there a person identified as being in charge of student services?
2. Does the institution have a guidance and/or counseling program?
3. Does the institution provide a structured orientation program for all new students?
4. Does the institution have a written retention program as well as a process to identify and support "at-risk" students?
5. Does your institution follow a consistent process in implementing the written retention program?
6. What is your retention and graduation rates for the past five years?
7. What are your placement rates for graduates and completers for the past five years?

Publications & Advertising
1. Is the catalog in compliance with your regulators' standards?
2. Are student provided a student handbook?
3. Are employees provided a Faculty or Staff Handbook?
4. Are all institutional policies, procedures, rules and regulations published in various publications consistent among the publications?
5. Is all advertising and promotional literature presented in a manner which avoids leaving any false, misleading, or exaggerated impressions with respect to the institution, its personnel, its course and services or the occupation opportunities for its graduates?
6. In all advertising and promotional literature, do all references to financial aid availability include a phrase indicating that financial aid is available only if qualified?
7. Does the institution's statement of accreditation comply with the form and substance of your accrediting agency?
8. Is the institution's state operating and degree granting authority referenced appropriately.

Physical Plant & Education Facilities
1. Does the institution provide physical facilities for effective classroom instruction?
2. Does the institution provide favorable conditions for effective classroom instruction?
3. Are the safety provision and school plant in compliance with local, state, and federal regulations governing fire, safety, sanitation and accessibility?
4. Does the institution provide access to adequate technological resources?
5. Does the institution have an adequate disaster recovery plan for facilities and technology?
6. Do all reference to accreditation used in electronic media, including Internet websites, comply with your accrediting agency's standards for statements of accreditation?

Engagement & Community Service
1. Are the institution's structures and processes integrated and connected to the community that it serves? In what ways?
2. In what ways does the institution demonstrate that it is responsive to the needs of its constituencies? How and when is this measured?
3. In what ways does the institution integrate and serve the cultural diversity of its community by building effective bridges?
4. In what ways does the community participate in the institution's activities and co-curricular programs offered to the public?
5. In what ways does the institution demonstrate that it is a partner with the community that it serves?

Source: The Solutions Team (http://www.the-solutions-team.org/checklist.php)
<table>
<thead>
<tr>
<th>Country</th>
<th>Test Name, Introduction Date</th>
<th>Instrument</th>
<th>Format</th>
<th>Number of items</th>
<th>Duration of Assessment</th>
<th>Criterion-referenced or norm-referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Graduate Skills Assessment (GSA), 2000</td>
<td>Examination</td>
<td>Multiple-choice test and writing tasks</td>
<td>One multiple-choice test and two writing tasks (one reporting task and one argument task)</td>
<td>Three hours, (2 hours for the multiple-choice test and one hour for writing tests)</td>
<td>Norm</td>
</tr>
<tr>
<td>Australia</td>
<td>Course Experience Questionnaire (CEQ), part of the Graduate destination survey since 1993</td>
<td>Survey</td>
<td>Survey</td>
<td>25 items. Questions rating student satisfaction and generic skills development on a scale of 1-5 (where 1 = Strongly disagree and 5 = Strongly agree).</td>
<td>Five to ten minutes</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Australia</td>
<td>Graduate Destination Survey (GDS), 1972</td>
<td>Survey</td>
<td>Survey</td>
<td>19 items on employment, 6 items on further study</td>
<td>Five to ten minutes</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Brazil</td>
<td>Exame Nacional de Cursos (ENC or &quot;Provão&quot;), 1995-2003</td>
<td>Examination</td>
<td>Information not available.</td>
<td>Information not available.</td>
<td>Four hours</td>
<td>Norm</td>
</tr>
<tr>
<td>Brazil</td>
<td>Exame Nacional de Desempenho dos Estudantes (ENADE), 2004</td>
<td>Examination</td>
<td>Objective questions and essay questions</td>
<td>30 field-specific questions and ten general study questions</td>
<td>Four hours</td>
<td>Norm</td>
</tr>
<tr>
<td>Canada</td>
<td>National Graduate Survey (NGS), 1978. Follow-up Survey of Graduates, 1987</td>
<td>Survey</td>
<td>Survey</td>
<td>The CATI questionnaire of the NGS is 113 pages long and contains 18 sections. Most respondents answer only a portion of the questions within each section. Some respondents skip entire sections that are not applicable to them.</td>
<td>Not available</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Mexico</td>
<td>Exámen Nacional de Ingreso al Posgrado (EXANI-III), 1997</td>
<td>Examination</td>
<td>Multiple-choice test</td>
<td>120 test items. 54% (66 items) test general intellectual abilities, 46% (54 items) test competencies in information use</td>
<td>Four hours</td>
<td>Norm</td>
</tr>
<tr>
<td>Mexico</td>
<td>Exámen</td>
<td>Examination</td>
<td>Multiple-choice test</td>
<td>Depending on the</td>
<td>Several sessions</td>
<td>Criterion</td>
</tr>
<tr>
<td>Country</td>
<td>Test Description</td>
<td>Type</td>
<td>Format</td>
<td>Items</td>
<td>Duration</td>
<td>Reference</td>
</tr>
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<tr>
<td>Mexico</td>
<td>Exámenes Generales para el Egreso del Técnico Superior Universitario (EGETSU), 2000</td>
<td>Examination</td>
<td>Multiple-choice test</td>
<td>250 test items. 35% (87 items) constitute the general area component. 65% (163 items) constitute the specific area component.</td>
<td>Six hours (two sessions of three hours each)</td>
<td>Criterion</td>
</tr>
<tr>
<td>UK</td>
<td>Destinations of Leavers from Higher Education (DLHE), 2002 (replaced the &quot;First Destination Supplement&quot;)</td>
<td>Survey</td>
<td>Survey</td>
<td>56 items</td>
<td>Approximately 15 minutes</td>
<td>Not applicable</td>
</tr>
<tr>
<td>USA</td>
<td>Collegiate Assessment of Academic Proficiency (CAAP), 1988</td>
<td>Examination</td>
<td>Multiple-choice test and essay questions</td>
<td>Users can choose among six different skill modules. Each module has up to 72 questions. Users may add up to nine additional items.</td>
<td>40 minutes for each module</td>
<td>Norm</td>
</tr>
<tr>
<td>USA</td>
<td>Measure of Academic Proficiency and Progress (MAPP), 2006 (replaced the ETS &quot;Academic Profile&quot; test, 1992-2006)</td>
<td>Examination</td>
<td>Multiple-choice test, optional essay question</td>
<td>Long form contains 108 multiple-choice questions and takes 100 minutes. Short form contains 36 questions. Optional essay is available. Users may add up to 50 multiple-choice skill or knowledge questions</td>
<td>Two standard forms (two-hour tests) and six abbreviated forms (40-minute tests)</td>
<td>Criterion- and norm-referenced</td>
</tr>
<tr>
<td>USA</td>
<td>Tasks in Critical Thinking, 1992</td>
<td>Examination</td>
<td>Open-ended questions and problem-solving tasks</td>
<td>Information not available.</td>
<td>90 minutes for each task</td>
<td>Norm</td>
</tr>
<tr>
<td>USA</td>
<td>Major Field Tests, 1990 (based on the GRE Subject Tests)</td>
<td>Examination</td>
<td>Multiple-choice test</td>
<td>Information not available.</td>
<td>Two hours (three hours for MBA)</td>
<td>Norm</td>
</tr>
<tr>
<td>Country</td>
<td>Survey Title</td>
<td>Survey Type</td>
<td>Number of Questions</td>
<td>Duration</td>
<td>Notes</td>
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<tr>
<td>USA and Canada</td>
<td>National Survey of Student Engagement (NSSE), 2000 (in Canada since 2004)</td>
<td>Survey</td>
<td>About 90 questions</td>
<td>Approximately 15 minutes</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>
### Annex 3b. National approaches to learning outcomes assessment in higher education – Participants

<table>
<thead>
<tr>
<th>Country</th>
<th>Test Name, Introduction Date</th>
<th>Target Population</th>
<th>Selection of participants</th>
<th>Coverage of test application</th>
<th>Incentives for Participation</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Graduate Skills Assessment (GSA), 2000</td>
<td>Students at entry level and students at graduation level</td>
<td>Limited, self-selected sample (Voluntary assessment)</td>
<td>About 2000 students from about 20 universities from a variety of fields of study participate each year.</td>
<td>Students may add their GSA score to their curriculum vitae when they apply for a job.</td>
<td>At entry level: results help identify poorly performing students to follow up and offer assistance. At graduation level; results may be used as an additional criterion for graduation or for entry into post-graduate courses. Results provide information on &quot;value-added&quot; by the institution and on general education learning quality across courses and HEIs.</td>
</tr>
<tr>
<td>Australia</td>
<td>Course Experience Questionnaire (CEQ), part of the Graduate destination survey since 1993</td>
<td>Graduates who completed requirements for any higher education qualification in the previous calendar year</td>
<td>General assessment of all qualified candidates</td>
<td>Surveys are sent to all recent graduates of Australian HEIs (including international students). Response rates are around 60-65%.</td>
<td>HEIs receive feedback on their students' results. HEIs may analyze and report on their results for internal purposes.</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>Graduate Destination Survey (GDS), 1972</td>
<td>All graduates who completed requirements for any higher education qualification in the previous calendar year</td>
<td>General assessment of all qualified candidates</td>
<td>Surveys are sent to all recent graduates of Australian HEIs (including international students). Response rates are around 60-65%.</td>
<td>HEIs receive feedback on their students' results. HEIs may analyze and report on their results for internal purposes.</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td>Exame Nacional de Cursos (ENC or &quot;Provão&quot;), 1995-2003</td>
<td>Students at graduation level</td>
<td>General assessment of all qualified candidates</td>
<td>All graduating students from courses within previously defined areas of study. In 2003, testing covered more than 460,000</td>
<td>Participation was mandatory: Reception of graduation diploma is conditional to participation. Awards were</td>
<td>Participation was mandatory. Courses and institutions receive feedback regarding the performance of their students.</td>
</tr>
<tr>
<td>Country</td>
<td>Program/Survey</td>
<td>Students enrolled in 6,500 courses totaling over 70% of all graduating students</td>
<td>given to students with the best performances compared to students in the same field enrolled in other courses/HEIs.</td>
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<tr>
<td>Brazil</td>
<td>Exame Nacional de Desempenho dos Estudantes (ENADE), 2004</td>
<td>Students at entry level (having covered between 7% and 22% of curriculum) and students at graduation level (having covered at least 80% of curriculum)</td>
<td>A random sample is selected from a list including all qualified students. If courses have less than 20 students, all students are tested. Participation is mandatory. Courses and institutions receive feedback regarding the performance of their students in absolute and relative terms. As opposed to the &quot;Provão&quot;, ENADE does not divulge results via the media. Results are communicated more discretely through bulletins on the internet.</td>
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<tr>
<td>Canada</td>
<td>National Graduate Survey (NGS), 1978. Follow-up Survey of Graduates, 1987</td>
<td>Graduates from all public HEIs (universities, colleges, trade schools). NGS: two years after graduation. Follow-up Survey: five years after graduation (same respondents)</td>
<td>A sample is selected using a stratified design to provide accurate estimates by province, program, and field of study. Sample sizes range from 35,000 to over 40,000 graduates. Participation is voluntary. The average response rate is around 65%. Individual HEIs are not the focus of assessment, thus no possible negative impact. HEIs receive feedback on their graduates’ labor market outcomes. HEIs may analyse and report on their results for internal purposes.</td>
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<tr>
<td>Mexico</td>
<td>Exámen Nacional de Ingreso al Posgrado (EXANI-III), 1997</td>
<td>Graduates applying for entry into post-graduate study programs</td>
<td>General assessment of all students applying for post-graduate admission or scholarships in institutions. All graduates applying for admission or scholarships in post-graduate institutions that use the test. 13,604 Participation is mandatory for entry into some post-graduate programs. Allows students to Individual HEIs are not the focus of assessment, thus no possible negative impact. Post-graduate HEIs</td>
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<tr>
<td>Country</td>
<td>Test Name</td>
<td>Description</td>
<td>Purpose</td>
<td>Achievements</td>
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<tr>
<td>Mexico</td>
<td>Exámen General Para el Egreso de la Licenciatura (EGEL), 1994</td>
<td>Students from non-technical HEIs having covered 100% of the curriculum (graduated or not) decide whether to assess students. HEIs may decide on size and characteristics of the student sample. Individual students may sign up for voluntary participation.</td>
<td>Students may sign up voluntarily. HEIs may sign up sample groups of their students.</td>
<td>HEIs receive feedback on their students' results. HEIs may analyse and report on their results for internal purposes. Results may be used as an additional criterion for graduation or for higher-level course entry.</td>
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<tr>
<td>Mexico</td>
<td>Exámenes Generales para el Egreso del Técnico Superior Universitario (EGETSU), 2000</td>
<td>Students from technical HEIs having covered 100% of the curriculum (graduated or not)</td>
<td>General assessment of all qualified candidates</td>
<td>All graduate level students of all 48 technical HEIs throughout the country.</td>
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<tr>
<td>UK</td>
<td>Destination s of Leavers from Higher Education (DLHE), 2002 (replaced the 'First Destination Supplement')</td>
<td>Recent graduates from publicly-funded HEIs who obtained a relevant qualification and who studied full-time or part-time (approximately six months after graduation)</td>
<td>General assessment of all qualified candidates</td>
<td>Questionnaires are sent to all qualified students. In 2002/03, 77% of the full-time qualifiers (251,300 students) and 70% of the part-time qualifiers (60,900 students) responded.</td>
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<tr>
<td>USA</td>
<td>Collegiate Assessment of Academic Proficiency (CAAP),</td>
<td>All types of students</td>
<td>States or HEIs decide whether to assess students and determine the size and</td>
<td>Between 1988 and 2001, the test has been used by more than 600 HEIs and more than</td>
<td>Incentives for test takers may be provided by some HEIs. Motivation</td>
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<td>provide evidence of their proficiency to apply for scholarships.</td>
<td></td>
<td>HEIs receive feedback on their students' results. HEIs may analyse and report on their results for internal purposes.</td>
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<tr>
<td>Year</td>
<td>Program</td>
<td>States or HEIs</td>
<td>Characteristics of the student sample</td>
<td>Questions on the objective tests help determine how seriously students took the test.</td>
<td>Their results for internal purposes. Results may provide information on &quot;value-added&quot; by the institution and on general education learning quality across courses and HEIs.</td>
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<tr>
<td>1988</td>
<td>USA: Measure of Academic Proficiency and Progress (MAPP), 2006 (replaced the ETS &quot;Academic Profile&quot; test, 1992-2006)</td>
<td>All types of students</td>
<td>States or HEIs decide whether to assess students and determine the size and characteristics of the student sample.</td>
<td>The Academic Profile (1992-2006) on which the MAPP is based has been used by 375 HEIs and 1 million students</td>
<td>Incentives for test takers may be provided by some HEIs.</td>
<td></td>
</tr>
</tbody>
</table>

**USA**

<table>
<thead>
<tr>
<th>Year</th>
<th>Program</th>
<th>States or HEIs</th>
<th>Characteristics of the student sample</th>
<th>Questions on the objective tests help determine how seriously students took the test.</th>
<th>Their results for internal purposes. Results may provide information on &quot;value-added&quot; by the institution and on general education learning quality across courses and HEIs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>Tasks in Critical Thinking, 1992</td>
<td>All types of students</td>
<td>States or HEIs decide whether to assess students and determine the size and characteristics of the student sample.</td>
<td>Between 1992 and 2001, the test has been administered at 35 institutions to 200-500 students at each institution</td>
<td>Incentives for test takers may be provided by some HEIs.</td>
</tr>
</tbody>
</table>

HEIs receive feedback on their students' results. HEIs may analyse and report on their results for internal purposes. Results may provide information on "value-added" by the institution. Results show student performance in critical thinking compared to students from other courses/HEIs.
| USA | Major Field Tests, 1990 (based on the GRE Subject Tests) | Senior students (4-year colleges) | States or HEIs decide whether to assess students and determine the size and characteristics of the student sample. | More than 500 colleges and universities employ the test per year. In the 1999-2000 academic year, more than 1,000 departments from 606 HEIs administered the test to nearly 70,000 students. | Test is often given as a capstone course or in the last semester of study as part of a graduation requirement. | HEIs may incorporate the assessment into their course syllabi and make the exam a graduation requirement. HEIs may analyse and report on results for internal purposes. Results show student performance in the specific area of study compared to students from other HEIs. |
| USA and Canada | National Survey of Student Engagement (NSSE), 2000 (in Canada since 2004) | First-year and senior students (4-year colleges) | A random sample is selected from a list including all first-year and senior students. | Since 2000, almost 1,000 different North American universities and colleges have administered NSSE to more than 1,160,000 students. Minimum sample sizes are determined by undergraduate enrollment (sample sizes vary between 450 and 1,000 students per HEI) | HEIs receive feedback on their students' results. HEIs may analyze and report their results for internal purposes. Results allow to identify aspects of the undergraduate experience that can be improved through changes in policies. |
Annex 3c. National approaches to learning outcomes assessment in higher education – Outcomes assessed and results

<table>
<thead>
<tr>
<th>Country</th>
<th>Test Name, Introduction Date</th>
<th>Focus of assessment</th>
<th>Type of outcomes assessed</th>
<th>Type of results yielded</th>
<th>Use of assessment results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Graduate Skills Assessment (GSA), 2000</td>
<td>Broad abilities: Critical Thinking, Problem Solving, Written Communication (ACER is currently considering modifications such as the addition of basic skills, management skills, IT skills, research skills). Domain-specific knowledge and abilities: (Not yet included but ACER is currently considering the possibility of testing elements within various broad Field of Study groups) Non-cognitive outcomes: Interpersonal understanding</td>
<td>General education results of entry-level students and graduation-level students</td>
<td>HEIs: At entry level: identify poorly performing students to follow up and offer assistance. At graduation level: use results as an additional criterion for entry into post-graduate courses. Information on &quot;value-added&quot;: benchmark and analyze trends, document/demonstrate program effectiveness and improvement over time, compare students' achievement levels with national user norms, develop and improve curricula, determine student eligibility for upper-division studies. Government: Collect information on the quality of learning outcomes across HEIs for national and potentially international benchmarking of graduate skills. Employers: The Government promotes the test to employers and supports its use as a standard recruitment tool.</td>
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<tr>
<td>Australia</td>
<td>Course Experience Questionnaire (CEQ), part of the Graduate destination survey since 1993</td>
<td>Students, Programs, Institutions</td>
<td>Generic academic abilities: Problem Solving, Analytic Skills, Written Communication Skills. Non-cognitive outcomes: Teamwork skills, Confidence in tackling unfamiliar situations, Ability to plan work. Student satisfaction with the following: Teaching, Goals and Standards, Workload, Assessment.</td>
<td>Graduate satisfaction with teaching and learning. Self-reported gains in academic skills related to the HEI experience.</td>
<td>HEIs: Benchmarking, trend analysis, evaluation of programs, curriculum development and improvement. Provide national accountability data. Government: Ensure quality and performance management within HEIs. Inform student choice. Assess and plan for the needs of the HE sector. Since 2005, results from the CEQ are used for performance-based incentive funding through the national &quot;Learning and Teaching Performance Fund (LTPF)&quot;</td>
</tr>
<tr>
<td>Country</td>
<td>Program</td>
<td>Programs</td>
<td>Behavioral outcomes: Employment outcomes approximately 4 months after graduation: availability for employment, sectors of employment, average annual salaries, graduates' job search activities. Further study activities, such as mode of study (full/part-time), levels of study, fields of education, and institution.</td>
<td>Information on employment and further study</td>
<td>HEIs: Benchmarking, trend analysis, evaluation of programs, curriculum development and improvement to optimize labor market and further study outcomes. Provide national accountability data. <strong>Government:</strong> Ensure quality and performance management within HEIs. Inform student choice. Assess and plan for the needs of the HE sector. Since 2005, results from the GDS are used for performance-based incentive funding through the &quot;Learning and Teaching Performance Fund (LTPF)&quot;</td>
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<tr>
<td>Australia</td>
<td>Graduate Destination Survey (GDS), 1972</td>
<td>Programs</td>
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<tr>
<td>Brazil</td>
<td>Exame Nacional de Cursos (ENC or &quot;Provão&quot;), 1995-2003</td>
<td>Programs</td>
<td>Domain-specific knowledge and abilities that are considered essential and common to all HEI curricula in the specific domain. Available for 26 subject areas.</td>
<td>Inter-institutional performance comparisons between students from the same field of study</td>
<td>HEIs: Good scores were widely used for commercial purposes (advertisements &amp; publicity). Results often served to mobilize students and professors to make a joint effort to maintain good scores/improve bad ones. <strong>Government:</strong> Since 2001, the test served as a guidance for accreditation and re-accreditation, but punitive measures were only taken in extreme cases. <strong>General Public:</strong> Provão results were widely divulged by the media to inform prospective students and society at large about the quality of learning across HEIs</td>
</tr>
<tr>
<td>Brazil</td>
<td>Exame Nacional de Desempenho dos Estudantes (ENADE), 2004</td>
<td>Programs and institutions</td>
<td>Domain-specific knowledge and abilities that are considered essential and common to all HEI curricula in the specific domain. Available for 13 study areas. <strong>General content knowledge:</strong> Among the assessed themes are biological and social diversity, public</td>
<td>Differences in cognitive results between entry-level students and graduation-level students</td>
<td>Students: Prove their performance according to national standards to potential employers. HEIs: Benchmarking, trend analysis, evaluation of programs, curriculum development and improvement. Provide national accountability data. <strong>Government:</strong> ENADE is one aspect of a combination of performance indicators used for HEI evaluations. <strong>Employers:</strong> may ask for a candidate's test results as objective evidence of proficiency in the</td>
</tr>
<tr>
<td>Country</td>
<td>Survey Title</td>
<td>Participants</td>
<td>Outcomes</td>
<td>HEIs:</td>
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<tr>
<td>Canada</td>
<td>National Graduate Survey (NGS), 1978. Follow-up Survey of Graduates, 1987</td>
<td>Students, Programs and institutions</td>
<td>Behavioral outcomes: Graduate satisfaction with their HEI experience. Employment outcomes two years and five years after graduations: Information on the number, characteristics, and duration of all jobs held since graduation, on the length of job search, the match between education and occupation.</td>
<td>HEIs: Benchmarking, trend analysis, evaluation of programs, curriculum development and improvement to optimize labor market and further study outcomes. Provide national accountability data. Government: Assess and plan for the needs of the HE sector.</td>
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<tr>
<td>Mexico</td>
<td>Exámen Nacional de Ingreso al Posgrado (EXANI-III), 1997</td>
<td>Institution types and regions</td>
<td>General academic abilities: Verbal and mathematic reasoning. Capacities to infer, analyze and synthesize. Competencies in information use: organize, obtain and understand information</td>
<td>HEIs: Use individual student results to compare performance of applicants and to facilitate decision-making on student admission and/or scholarship attribution</td>
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<tr>
<td>Mexico</td>
<td>Exámen General Para el Egreso de la Licenciatura (EGEL), 1994</td>
<td>Students</td>
<td>Domain-specific knowledge and abilities that are considered essential and common to all HEI curricula in the specific domain.</td>
<td>Students: Prove their performance according to national standards to potential employers. HEIs: Benchmarking, trend analysis, evaluation of programs, curriculum development and improvement. Some HEIs</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Exam/Test Name</td>
<td>Start Professional Practice</td>
<td>Results as an Additional Criterion for Certification or Graduation</td>
<td>Description</td>
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<tr>
<td>Mexico</td>
<td>Exámenes Generales para el Egreso del Técnico Superior Universitario (EGETSU), 2000</td>
<td>Different subject areas</td>
<td>Specific area component: comprehension levels and problem-solving skills needed in the student's major field. Tests are available for all 19 areas of the Technical University Track. Common area component: general academic skills, knowledge and ability necessary for all careers, namely social and economic knowledge, IT, and English.</td>
<td>Students: Prove their performance according to national standards to potential employers. Employers: may ask a candidate's test results as objective evidence of proficiency in the professional area.</td>
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<tr>
<td>UK</td>
<td>Destinations of Leavers from Higher Education (DLHE), 2002 (replaced the &quot;First Destination Supplement&quot;)</td>
<td>Behavioral outcomes: Employment and further study outcomes six months after graduation: how many graduates are in employment, the types of jobs they go into, and how many go onto further study.</td>
<td>Information on employment and further study</td>
<td>HEIs: Benchmarking, trend analysis, evaluation of programs, curriculum development and improvement to optimize labor market and further study outcomes. Provide national accountability data. Government: Assess and plan for the needs of the HE sector.</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>Collegiate Assessment of Academic Proficiency (CAAP), 1988</td>
<td>Generic academic abilities: Writing (objective and essay), reading, mathematics, science reasoning, critical thinking, curricular</td>
<td>Depending on simple or value-added administration: Cumulative outcomes in general academic skills or growth in general</td>
<td>HEIs: Satisfy accreditation and accountability reporting requirements, benchmark and analyze trends, document/demonstrate program effectiveness and improvement over time, compare students' achievement levels with national user norms, develop and improve</td>
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<tr>
<td>USA</td>
<td>Measure of Academic Proficiency and Progress (MAPP), 2006 (replaced the ETS &quot;Academic Profile&quot; test, 1992-2006)</td>
<td>Students, Programs, Institutions</td>
<td>Broad disciplinary abilities: Reasing and critical thinking are measured in the context of humanities, social sciences, or natural sciences. <strong>Generic academic abilities:</strong> reading, writing, critical thinking, mathematics</td>
<td>Growth in generic academic abilities while at college</td>
<td>HEIs: Satisfy accreditation and accountability reporting requirements, benchmark and analyze trends, document/demonstrate program effectiveness and improvement over time, compare students' achievement levels with national user norms, develop and improve curricula, determine student eligibility for upper-division studies, counsel individual students for academic achievement.</td>
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<tr>
<td>USA</td>
<td>Tasks in Critical Thinking, 1992</td>
<td>Students</td>
<td><strong>Generic academic abilities:</strong> College-level higher order thinking skills: inquiry, analysis, communication skills</td>
<td>Proficiency in college-level higher order thinking skills</td>
<td>HEIs: Satisfy accreditation and accountability reporting requirements, benchmark and analyse trends, document/demonstrate program effectiveness and improvement over time, compare students' achievement levels with national user norms, develop and improve curricula, determine student eligibility for upper-division studies.</td>
</tr>
<tr>
<td>USA</td>
<td>Major Field Tests, 1990 (based on the GRE Subject Tests)</td>
<td>Students, Programs</td>
<td>Domain-specific knowledge and disciplinary abilities that are considered most important within each major field of study: factual knowledge, ability to analyze and solve problems, ability to understand relationships, ability to interpret material including graphs, Mastery of concepts, principles, and knowledge expected of students at the conclusion of an academic major in specific subject areas.</td>
<td></td>
<td>Students: Test is often given as a capstone course or in the last semester of study as part of a graduation requirement. HEIs: Scores may be used for medium to high-stakes decisions. Document proficiency in the specific area in the last semester of study to measure effectiveness of departmental curricula. Satisfy accreditation and accountability reporting requirements, benchmark and analyze trends, document/demonstrate...</td>
</tr>
<tr>
<td>USA and Canada</td>
<td>National Survey of Student Engagement (NSSE), 2000 (in Canada since 2004)</td>
<td>Students, Programs, Institutions</td>
<td>Behavioral outcomes: information on student engagement: how undergraduates spend their time and what they gain from courses, extracurricular activities, and HEI services.</td>
<td>Secondary indicators of learning: Information on student participation in learning opportunities during the college experience. Self-reported gains in academic skills related to the college experience.</td>
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<tr>
<td>HEIs: Develop and improve curricula and services to enhance student engagement. Satisfy accreditation and accountability reporting requirements (NSSE provides an &quot;Accreditation Toolkit&quot; facilitating the use of NSSE results for regional accreditation). Benchmark and analyse trends, document/demonstrate program effectiveness and improvement over time, compare students' achievement levels with national user norms.</td>
<td>General Public: Results are public and provide information about what students gain from their HEI experiences. Government: Data can be used as an indicator of institutional effectiveness in accrediting processes. Data supports national and sector benchmarking processes.</td>
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Annex 4. The Balanced Score Card (BSC) strategic planning process

The BSC strategic planning process. The use of the BSC methodology in the development, implementation and control of strategic plans in higher education involves 10 distinct phases as outlined below:

1. Needs assessment: This phase involves the assessment of the strategic planning needs and existing capacity of MEYS, mandated to develop the strategic plan, and the organizational culture and barriers to such undertaking, including the need to consider the introduction of a change management component in the plan.

2. Preliminary strategic directions: Develop a preliminary list of eight to fifteen strategic directions, and the key stakeholders’ interests in these strategic directions. This phase also involves the management of discussions and deliberations to reach agreements on the identified strategic directions from all stakeholder groups.

3. Develop strategy maps: Define the elements of a strategy map for each identified strategic goal as outlined in Figure 7.

4. Define BSC objectives in the Score Cards: For each of the strategic goals identified, establish score cards along each of the four BSC perspectives; the stakeholders, the processes, the resources, and financial perspectives as outlined in Figure 8. Define clearly the objectives along the four perspectives for each strategic goal.

5. Define relevant performance measures (indicators) and targets: Define relevant measures and indicators of the achievement of the objectives in step 4 above, along the four perspectives in the score cards. Use best practice from relevant disciplines including business process management, and project management to define these measures and indicators. For each identified objective, with its associated indicators or performance measures, define achievement targets to be attained at the end of the strategic planning period.

6. Identify relevant initiatives and projects: scan the emerging score cards across the four perspectives to identify relevant initiatives and projects to be used as building blocks for strategy implementation.

7. Develop comprehensive project plans: Define initiative and projects by “integrating” the various objectives into coherent well defined “thematic” projects. Develop comprehensive project plans for each identified project using the best project planning practices that include project scope definition, work breakdown structure WBS, project schedule and critical path, project budget, as well as all relevant projects’ subsidiary plans, including project quality management plan, risk management plan, human resources management plan, communication management plan, and procurement management plan.

8. Develop integrative program (or portfolio) management plans: Integrate individual planned project into “thematic” programs or portfolios in well identified themes such as faculty development program, and research, development and innovation RDI program.

9. Manage, monitor and control the implementation of all projects and programs: Establish and staff a Project Management Office (PMO) to manage the implementation of all projects and programs using the best practices for project (program) implementation and control.

10. Assess the Success of the Strategic Plan: Collect and analyze all relevant information about the outcome of all projects, programs and portfolios, and carry out a critical assessment of the strategic plan.
Figure 7. A typical BSC strategy map corresponding to a strategic goal in higher education

1. Needs Assessment
2. Preliminary Strategy
3. Strategy Maps
4. Objectives
5. Performance Measures and Targets

6. Initiatives or Projects
7. Projects Planning
8. Program Planning
9. Project & Program Management
10. Strategy Evaluation

Score Cards
Figure 8. The Score Cards of the BSC

Quality and Relevance of the Knowledge & Skills Acquired

Quality and Relevance of the Learning Experience

Effective Use of Program PACs & Coop Placement

Effective Program and Curricular Development Process

Academic ICT Infrastructure & LRC Upgraded

The Stakeholders’ (Graduates and Employers) Perspective (S)

Faculty Upgrading
  • IT
  • Professionally

Knowledge Resources Perspective (R)

The Internal Business Processes Perspective (P)

Strategic Goal 1: Academic Quality of Programs and the Occupational Relevance of Graduates

Strategic Goal 1

• Academic Quality of Programs and the Occupational Relevance of Graduates
Annex 5. Review of the governance models and the autonomy of HEIs in Europe

**Institutional autonomy:** Recent developments are marked by a pronounced drive towards enhanced institutional authority to decide on university affairs. This trend has been fostered by some major legislative changes in the past few years, mainly reflecting a move towards more managerial universities with smaller decision-making bodies, into which external stakeholders have been integrated. In a majority of European universities, external members now participate in the most important decisions in the institution’s governing bodies, and in most systems the government still partly or completely controls the appointment of external members. In systems where decision-making bodies did not previously include external members, this development is considered rather controversial, particularly if some of these members are selected by the government.

Examples from a number of regions and countries illustrate the range of experiences in this area:
- In most Northern European countries, universities are able to select their external members freely.
- In Portugal, a new higher education law passed in 2007 has improved public universities’ autonomy in many respects. If they fulfill certain criteria – for example, at least half of their funding is external – public universities can apply for the legal status of foundations. This allows for greater institutional flexibility, in particular in deciding on governance structures and financial affairs.
- In Finland, as of January 2010, universities are now corporations under public law. Two universities have acquired the status of foundations under private law. In addition, at least 40% of the membership of the board of a public university must be external.
- In Lithuania, there has been a similar shift. The status of the governing bodies has changed with the passing of a new law in spring 2009. Previously, the main decision-making body was the senate, while the council played a supervisory role. Now the senate, which mainly comprises internal members, decides on academic issues and acts as a preparatory body for the council.
- A new governing structure is about to be introduced in Estonia, whereby the main governing body will be a board comprised of a majority of external members, who are appointed by the ministry and the academy of sciences.
- Italy and Poland will likely also see changes in laws regulating university governance in 2012.
- In Sweden, the internal organization of universities was deregulated in January 2011. Faculty boards are no longer legally obligatory and universities are now free to determine their existence and roles.

**Financial autonomy:** The state of financial autonomy in Europe has been marked by three major developments:
- reduced funding for higher education
- the quest by institutions to diversify funding sources
- the increased tendency to target public funding at strategic national priorities.

In terms of **reduced funding for higher education**, this has been especially acute as a result of the economic crisis, which has unfolded since October 2008. Not only are funds diminishing in many cases, but the form in which they are provided to universities is also changing. They are increasingly subject to restrictions placed on their allocation, or accompanied by more stringent accountability requirements. This has given public authorities greater steering power over universities, which has significantly reduced institutions’ autonomy and their capacity to manage funds as they see fit.

At the same time, universities have gained greater freedom of action for certain aspects of financial management. For example, almost all European countries now allocate their funding in the form of block grants, although, as described above, numerous restrictions remain concerning their internal allocation.

Universities’ ability to retain surpluses has also been questioned as a result of the economic crisis. Key examples include:
- the Nordic countries, where some universities have had to justify keeping their surpluses for future strategic investments
- **Brandenburg** universities, which faced a government attempt to reclaim EUR10 million of a EUR 25 million public funding surplus over a two-year funding period, despite the fact that universities in Brandenburg are entitled by law to keep their surpluses.

In regard to **diversification of funding sources**, there has been a noticeable move towards student contributions. Notably, North Rhine-Westphalia has bucked this trend by abolishing in 2011 tuition fees at the bachelor and master level, which had been set by the university under an externally imposed ceiling. More telling, however, may be moves in the opposite direction, for example in:

- **Finland** and **Sweden**, which have both taken steps recently to introduce fees for non-EU students
- the **UK**, where the ceiling for national/EU students has been raised almost three-fold to GBP 9,000 beginning in autumn 2012.

In addition, more countries now allow their universities to borrow money on the financial markets. **Lithuanian** universities have recently obtained the – albeit limited – capacity to do so. In practice, however, this ability is not always used. In some countries, including Latvia, universities require the authorization of the ministry to borrow, but this is unlikely to be granted.

Finally, universities in some systems have at least formally increased their financial autonomy by gaining ownership of the buildings they occupy. Developments in countries such as **France**, **Finland**, and **Luxembourg** serve to illustrate this point.

The **increased tendency to target public funding at strategic national priorities** is clearly in evidence in contexts where, for example, funding for the so-called STEM (science, technology, engineering, mathematics) subjects is increasing. Efforts in this vein are in evidence in **Austria**, **Finland**, **Portugal** and the **UK**. Focusing public spending in this way is boosting governments’ steering power and limiting universities’ ability to act autonomously, particularly if these funds are being carved out of block grant funding.

**Staffing autonomy**: Staffing autonomy of European universities has improved in relation to recruitment procedures. Universities in most countries are free to recruit their senior academic and administrative staff. Such appointments need to be confirmed by an external authority only in a small number of countries. However, in most systems universities are not entirely free to set the salaries of their staff, while elsewhere employees now no longer have civil servant status. Relevant examples of the range of developments in this area include the experiences of:

- **Hesse**, where significant changes to the contractual employment framework have meant that universities no longer have to grant civil servant status to staff employed after December 2009
- **Finland**, where, since 2010, institutions themselves, rather than the state, have become employers of university staff
- **Austria**, where a change of the collective bargaining agreement in October 2009 introduced minimum wages for all university staff
- **Luxembourg**, where an expected change to the higher education law will enable promotions based on merit
- **Ireland**, where, since 2009, the State Employment Control Framework has prescribed a 6% cut to employee numbers and a ban on promotions and recruitments for permanent positions in publicly funded sectors; similar measures have been introduced in **Latvia** and **Italy**
- **Greece**, **Ireland**, **Spain** and **Portugal**, where salary reductions have been implemented across the public sector, directly affecting university staff.

**Academic autonomy**: With regard to academic autonomy, recent reforms of quality assurance processes in particular have had a strong impact. Most European countries impose some regulations on the overall number of students. Free admission for everyone holding the basic qualifications is the exception; and even in these countries, pressures on public funding might lead to future changes. In all other countries, the number of students may be co-regulated with a public authority or decided upon solely by either a public authority or the universities. Key issues and examples include the following:

- The selection of students is carried out independently by the university in over a third of European countries.
The introduction of new degree programmes usually requires some form of approval from a public authority. In approximately a quarter of the countries, universities are able to open degree programmes without prior accreditation. In most of the remaining systems in Europe, universities require prior accreditation for programmes to be introduced or publicly funded.

Universities are generally unable to select their quality assurance mechanisms. Only in four countries are they free to do so. However, in just under one third of the European systems, universities can at least select the quality assurance agency with which they will work.

In Ireland, universities have established the Irish Universities Quality Board to review and validate their processes externally. A new national body is being established to evaluate quality and qualifications in all higher education institutions, raising some concern about whether the evaluation approach will remain the same under the new body.

In the Netherlands, the mode of quality assurance has changed as of 2011 from programme-accreditation only to institutional quality audits.

In Austria, a new law for external quality assurance in the higher education sector will be introduced in 2012, under which Austrian universities will generally be limited to working with agencies included in the European Quality Assurance Register, although the minister may grant exceptions by ministerial decree.

In Estonia, the law regulating quality assurance was changed in 2010, giving universities the ability to select international agencies to conduct the required accreditation processes. Estonia is also likely to base its list of eligible international quality assurance agencies on the European Quality Assurance Register.

Annex 6. The system of state subsidies for public universities in Bulgaria

Core subsidy (79% share in total state transfers, 2010)
The core subsidy is *based* on the enrolment targets (and not the actual number of students) proposed by HEIs and endorsed by the Government, and contributes toward salaries and recurrent expenditure of HEIs. HEIs can allocate funds from the core subsidy at their discretion and any end-year surplus is retained rolled over to the next fiscal year, without affecting the size of the next year core subsidy. It is first calculated by professional fields, multiplying the *equivalent* number of the enrollment target for first grader in each professional field in each HEI to the differentiated per-student expenditure norm corresponding to the professional field, and multiplied by the standard duration of four years of an undergraduate program (even though students may drop out after their first year or prolong their degree study beyond the four year timeframe). The core subsidy (CS) is the sum total of the core subsidies for each professional field (CS<sub>p</sub>) offered by the public HEIs. The latter are calculated using the formula:

\[ \text{CS}<sub>p</sub> = \text{EN}<sub>p</sub> \cdot \text{Ne} \]

whereby

\( \text{EN}<sub>p</sub> \) represents the *expenditure norm* for a professional field
\( \text{Ne} \) represents the *number of equivalent students* (1<sup>st</sup> year entrants) under the state quota for a professional field

\( \text{EN}<sub>p</sub> \) (expenditure norms) are differentiated by professional fields, using a cost coefficient (weight) determined as the ratio of the financial/teaching effort required to train a student in a study field to the financial effort required to train a student in the study field “Pedagogy, Science and Education”, which is taken as the standard with value 1:

<table>
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<tr>
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\( \text{Ne} \) (equivalent number of students and doctoral students in a professional field the HEIs) is based on the absolute number of students approved for admission under the state quota for BA, MA and PhD degree programs on full-time and part time basis, converted into full time equivalents using the formula:

\[ \text{Ne} = \text{Nr} + \text{Ne}_{\text{emc}} / 3 + 2 \cdot \text{PhD}_{r} + 2 \cdot \text{PhD}_{\text{emc}} / 3 + F, \] whereby

\( \text{Ne} \) – equivalent number of students<sup>11</sup> in a HEI
\( \text{Nr} \) - absolute number of state quota entrants on full-time basis
\( \text{Ne}_{\text{emc}} \) - absolute number of state quota entrants on part time-basis
\( \text{PhD}_{r} \) - absolute number of state quota PhD admitted in 1<sup>st</sup> grade of PhD program on full-time basis
\( \text{PhD}_{\text{emc}} \) - absolute number of state quota PhD admitted in 1<sup>st</sup> grade of PhD program on part-time basis
\( F \) – absolute number of EU/EEA students

Science subsidy (2.8% share in total state transfers, 2010)

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<sup>11</sup> No difference in the formula is made between the students who pursue their studies in the various educational and qualification degrees, such as "professional bachelor", "bachelors" and "masters of sciences"
The science subsidy is a project-based target subsidy ensuring the basic needs of HEIs for conducting research, producing publications, printing textbooks and scientific research reports. Allocations are made across all HEIs in installments (50:30:20% portions, disbursed in three points in the fiscal year) with the size of allocation depending on the approved projects and the performance of individual HEIs with respect to the use of the science subsidy they received in the previous year, as well as the implementation of the approved projects in the current fiscal year. Performance is analyzed transparently against a set of standardized criteria, defined in a regulation. By law, the size of science subsidy should amount to no less than 10% of the size of the core subsidy, but in practice the allocations barely exceed 3% on average for all HEIs, with only two universities (2010) getting 10% or slightly above, reflecting the limited focus of the prevailing part Bulgarian HEIs on research, with the four largest universities in Bulgaria (out 33 public HEIs) accounting for 82% of the entire research output of HEIs.

Social subsidy (14.3% share in total state transfers, 2010)
The social subsidy is a target subsidy for the social expenditure of students, incl. scholarships and dormitories. The size is determined annually in proportion to the number of students enrolled in HEIs. Actual allocation of scholarship funds across students is determined by each HEI, but central regulations require that awarding is both means-tested and merit-based (by-laws stipulate that eligibility for scholarships be based on two mandatory criteria, income of students’ families in the past 6 months, and the average grades score in the preceding semester). Since 2010 this subsidy co-exists with the student loan scheme, which, however, have very limited focus on living expenses of students;

Capital subsidy (3.3% share in total state transfers, 2010)
The capital subsidy is a target subsidy covering the capital investment needs of HEIs, it is not based on a predefined allocation mechanism. The share of the capital subsidy from the total pool of state transfers a HEI receives varies by institution from 2 to 8%. 


<table>
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<th>HEIs in Bulgaria</th>
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*Source: Ministry of Education, Youth and Science, Center for Education Information*
Annex 8. Country cases for funding HEIs through performance contracts

Austria: The Austrian higher education sector underwent some radical changes in recent years. In 2002, a new university law was initiated, changing institutional and financial autonomy and the funding mechanism for universities and Fachhochschulen. Funding of universities was traditionally a rather intransparent mechanism of bilateral negotiations between university and Ministry. According to the new law, part of the universities’ public funds (90% of which are federal) are allocated (from 2007 onwards) as a lump sum, based on agreements reached in a Leistungsvereinbarung (performance agreement) drawn up between each university and the Ministry. A performance agreement is concluded for a period of three years. It is a contract in public law. 80% of the general funds (the lump sum) is negotiated between the university and the ministry. The remaining 20% is related to a formula that comprises some performance indicators. The budget related to the performance agreement is intended to cover both teaching and research activities. In addition to the performance agreements, universities may also receive funds for specific tasks. These funds are allocated on a competitive base, using peer review systems. In contrast to the universities, Fachhochschulen are institutions under private law. For the whole sector, a development and funding plan is decided upon between the Austrian federation, states and the Fachhochschul Council. The negotiations are based on calculated student places. The public funding is limited to 90% of the full cost; the remaining part is to be covered by local authorities and business sponsors.

Belgium-Flanders: In the new funding mechanism for higher education, in place from 2008, next to the formula-based lump sum an amount of some 12% of available funding will be set aside for multi-annual agreements between the education minister and each higher education institution. Each institution commits itself to work on agreed objectives in return for funding. Some of the aims and characteristics are enhancing the institution’s innovative capacity, increasing the participation of students from ethnic minorities and underrepresented social-economic groups, developing more flexible learning paths and opportunities for mature and employed students, improving the efficiency and the overall quality of the higher education system by pooling capacity and expertise (critical mass) and by developing joint study programs between HEIs.

Finland: In return for the larger autonomy in resource use, Finnish universities from 1998 onwards agree on target outcomes with the Ministry. These agreements (say performance contracts) are underlying the core formula-based funds (89% of institutional funding). The formula consists of a fixed amount and a part based on input (a target number of new students admitted) and output indicators (degrees conferred), and a part based on third mission (knowledge transfer, societal services) activities. Since 1998, a smaller part of university resources (about 7%) is made available through national programs or based on performance criteria. These contracts stress strategic objectives and centers of excellence.

France: The major part (almost 80%) of French universities’ funding is through the San Remo model, by which the need for staff and recurrent expenditure is calculated. It comprises criteria like enrollment, floor surface and curriculum related indicators. In addition to the formula, some public resources are allocated based on four-year contracts. The concept of contracts between the state and individual HEIs was introduced in the 1984 law on higher education. The contractual policy was first limited to research but in 1989 all activities entered the realm of contractual policy. The contracts became known as contrat unique or contrat quadriennal (CQ). In addition there are contracts between the state and the region that comprise a substantial amount of the research funding. The research part of the CQ therefore covers only a very limited part of overall research funding (around 5%). The ministry has proposed to raise the part of the resources allocated through the contracts (up to 40%) in order to be able to meet the accountability requirements of the new (LOLF) budgeting legislation. The other part of the funding then should be based on student numbers. Although the CQs are also known as the unique contracts, there is a clear divide between the part in which research is addressed and the part that addresses teaching. The latter is far less detailed and only negotiated with the president of the HEI. The research part is more detailed and addresses issues for specific research units within the university.

Germany - Nordrhein-Westfalen: In 2002, some state (Länder) governments agreed upon covenants with the HEIs (e.g. Hessen). The covenants (Hochschulpakt) implied agreement on targets and financial means...
to reach those targets for the mid-term future. However, covenants were not 100% guaranteed as the Parliament was allowed to step back from them. In addition to these more abstract arrangements, some Länder started with special instruments of contract management (Zielvereinbarungen – target agreements), e.g. Nordrhein-Westfalen (NRW). All universities and Fachhochschulen in these states defined projects to build up their profiles and fixed them in three-year contracts with the ministry. In 2006, all Länder used Zielvereinbarungen (Jaeger & Leszczensky, 2006). There are no clear rules on what to do if one of the parties does not fulfill (part of) the contract. In January 2007, the Hochschulfreiheitsgesetz was effectuated. This Law completely revises the relationship between the state and the HEIs. The state withdraws from detailed interference and ‘enforces’ the autonomy and accountability of the HEIs. In this new setting, the new (third) generation performance contracts play a central role, linking the perspective of the individual HEI to the (policy) objectives of the state. The contracts comprise issues such as research priorities and the number of places for new entrants per department. HEIs commit themselves to show the position of their graduates on the labor market as an indicator for the ‘quality’ of the programs. The state guarantees funding for a multi-annual period. 80% of the government’s budget that is allocated through the contract is based on a formula, whereas 20% is negotiated and agreed upon by the HEI and the Ministry.

Spain – Valencia: Each autonomous region in Spain has a different funding system. Although most of the public funding is based on inputs (number of students, costs of different programs, etc) a modest portion is related to outputs. In some regions, the “performance funding” is related to similar indicators for all the universities in the region. In other regions, each university reaches a specific agreement with the regional government (a contract program) in order to establish specific multi-annual goals for the institution in such a way that the achievement of these goals is rewarded by extra funds. In the case of Valencia, the HEIs’ allocations, apart from the core (enrollment/formula-driven) funds (87%) consist partly (up to 10%) of a goal-oriented specific funding allocation. For the latter, the funding model includes fifteen objectives. Six of these are teaching-related, three are related to R&D, one is related to post-graduate studies, one to employment, one to innovation, one to management and two to cultural activities. These objectives are measured using thirty-one indicators. In the agreements between the university and the regional government, each university selects a specific set of indicators with the universities choosing the indicators closest to their profile. This approach resembles an à la carte contract funding system.

Denmark: Funding of teaching and research are separated in Denmark. The HEIs receive core funding through the taximeter system, which links teaching funds directly to the number of students who pass their exams. There is a two-tier system for research funding, where the first tier consists of the basic grants allocated by the different ministries directly to the institutions and the second contains research allocations from the National Research Councils, strategic research programs, foundations, ministries, and private firms. Since 1999, university development contracts have been established as a governance instrument. There is no straightforward link between the funding system and the institutional strategies. Referring to explicit institutional strategies, the universities sign development contracts with the Ministry of Science, Technology and Innovation. However, a university development contract is not a legally binding document. It is rather a ‘letter of intent’, stating the strategic areas that the university intends to focus on as well as the instruments the university intends to use in order to reach the set targets. Accordingly, there is no automatic relationship between reaching the set targets by the university and the grants awarded by the government. This may change soon because several stakeholders, including the Government, suggest that the development contracts in the future should be linked to funding.

Source: “Funding Higher Education: a view across Europe, ESMU, European Centre for Strategic Management of Universities