



Brussels, 29.5.2013
SWD(2013) 352 final

COMMISSION STAFF WORKING DOCUMENT

**Assessment of the 2013 national reform programme and convergence programme for
BULGARIA**

Accompanying the document

Recommendation for a Council Recommendation

**on Bulgaria's 2012 national reform programme and delivering a Council Opinion on
Bulgaria's convergence programme for 2012-2016**

{ COM(2013) 352 final }

CONTENTS

Executive summary	3
1. Introduction	5
2. Economic developments and challenges.....	6
2.1. Recent economic developments and outlook.....	6
2.2. Challenges	7
3. Assessment of policy agenda	10
3.1. Fiscal policy and taxation.....	10
3.2. Financial sector	15
3.3. Labour market, education and social policies	16
3.4. Structural measures promoting growth and competitiveness.....	20
3.5. Modernisation of public administration	24
4. Overview table	27
5. Annex	30

EXECUTIVE SUMMARY

Economic Outlook

According to the Commission 2013 spring forecast, real GDP growth is projected to recover gradually from 0.8% in 2012 to 0.9 % in 2013 and to 1.7 % in 2014. Unemployment, which edged up to 12.3% in 2012, is expected to level off in 2013 and stay high, at 12.4 % of the labour force, in 2014. HICP inflation slowed considerably to 2.4 % on average through 2012 and is expected to moderate to 2 % in 2013 following a reduction in some administered domestic energy prices and pick up to 2.6 % in 2014.

In 2012, the fiscal position continued to strengthen and the budgetary outcome was significantly better than expected. The headline budget deficit narrowed from 2% of GDP in 2011 to 0.8% in 2012 (well below target), though it is expected to rise to 1.3% of GDP in 2013 on the back of a slight fiscal stimulus. Bulgaria reached its medium-term objective – a structural budget deficit (the cyclically adjusted deficit minus one-off measures) of 0.5% of GDP in 2012. However, the Commission expects this to rise to 0.8%-0.9% in 2013-14. Bulgaria recorded the second-lowest debt ratio among EU Member States in 2012, at 18.5% of GDP, which is expected to fall to 17.9% in 2013 and rise again to 20.3% in 2014.

Key Issues

Bulgaria faces a set of interrelated policy challenges to achieve sustainable, robust growth and has been identified by the European Commission as experiencing macroeconomic imbalances. These relate in particular to external indebtedness, corporate sector deleveraging and the labour market.

The government has ensured financial stability and fiscal consolidation by outperforming its fiscal targets. The government has managed to achieve its medium-term objective for public finances, despite the slow economic recovery. In addition, the authorities took some steps towards improving tax collection and are currently implementing a major reform of the pension system.

Despite the progress the government has made in implementing its fiscal agenda, the most pressing challenges for the country have remained broadly unchanged since 2012: the labour market, education, health care, the business environment, public procurement, energy and resource efficiency. A persistent lack of institutional capacity is causing critical delays in implementing the necessary reforms and in absorbing EU funding, which could help support the reforms (as of January 2013, overall absorption of structural and cohesion funding was just 26.7%).

- **Labour market:** Bulgaria experienced one of the strongest drops in employment in the EU in 2008-12 (more than 8%) and has the EU's highest rate of young people not in employment, education or training (22.4 % in 2011). Declining labour force participation, high youth unemployment, skills and regional mismatches exacerbated by high emigration and inadequate pensions are also major concerns, given population ageing. A challenge will be to ensure that workers stay longer on the labour market, which will ease the pressure on pensions. Social policy is also a challenge, as

Bulgarian citizens are at the highest risk of poverty or social exclusion in the EU (49.1 % in 2011).

- **Education:** The education and training systems are not adapted to labour market needs. Bulgaria has the EU's highest share of low achievers in reading, mathematics and science, and the overall investment in education and training – particularly in primary, secondary and early childhood education – are well below the EU average, while the use of childcare is particularly low for those under three years old (covering only 7% of children in 2011), and is decreasing.
- **Healthcare:** An increase in the quality of public spending in the health sector is crucial to improving the population's health and reducing the pressure of recurrent expenditure overruns. The population's health needs are a major challenge, as are the lack of transparency in hospitals' financing, poor access for some social groups and regions and the disproportionately high out-of-pocket payments.
- **Poverty:** Bulgarian citizens are at the highest risk of poverty or social exclusion in the EU (49.1 % in 2011, almost twice the EU average). The rates of material deprivation for people up to 18 years of age and those above 65 are particularly worrying, while 43.6% of the overall population is experiencing severe material deprivation (2011 figures). Social assistance schemes are ineffective in supporting the inclusion of those further from the labour market.
- **Business environment:** A major challenge is to foster investment in innovation, which remains low (0.6 % of GDP in 2011) and to create a more favourable business climate, including for foreign investors. Businesses would also benefit from better tax administration, insolvency procedures and contract enforcement. There are also remaining deficiencies regarding public procurement and the independency, efficiency and quality of the justice system. Finally, access to finance for SMEs remains inadequate.
- **Energy and resource efficiency:** Bulgaria is highly dependent on imported energy. There is limited competition among energy suppliers, insufficient interconnections with neighbouring countries and an inadequately functioning energy market. High energy intensity, low energy efficiency and deficient environmental infrastructure also hamper business activity and competitiveness.

1. INTRODUCTION

In May 2012, the Commission proposed a set of country-specific recommendations (CSRs) for economic and structural reform policies for Bulgaria. On the basis of these recommendations, the Council of the European Union adopted seven CSRs in the form of a Council Recommendation in July 2012. These CSRs concerned public finances, the pension system, education, healthcare, the labour market, administrative capacity, public procurement, energy and deregulation. This Staff Working Document (SWD) assesses the state of implementation of these recommendations in Bulgaria.

The SWD assesses policy measures in light of the findings of the Commission's Annual Growth Survey 2013 (AGS)¹ and the second annual Alert Mechanism Report (AMR),² which were published in November 2012. The AGS sets out the Commission's proposals for building the necessary common understanding the priorities for action at national and EU level in 2013. It identifies five priorities to guide Member States to renewed growth: pursuing differentiated, growth-friendly fiscal consolidation; restoring normal lending to the economy; promoting growth and competitiveness for today and tomorrow; tackling unemployment and the social consequences of the crisis; and modernising public administration. The AMR serves as an initial screening device to determine whether macroeconomic imbalances exist or in Member States. The AMR found positive signs that macroeconomic imbalances in Europe are being corrected. To ensure that a complete and durable rebalancing is achieved, Bulgaria and 13 other Member States were selected for a review of developments in the accumulation and unwinding of imbalances.³

Against the background of the 2012 Council Recommendation, the AGS and the AMR, Bulgaria presented updates of its national reform programme (NRP) and of its convergence programme on 18 April 2013. These programmes provide detailed information on progress made since July 2012 and on the future plans of the government. The information contained in these programmes provides the basis for the assessment made in this document.

The programmes submitted went through a consultation process involving the national parliament and the social partners. Stakeholders as well as the general public were invited to submit proposals for consideration by the government.

Overall assessment

The analysis in this SWD leads to the conclusion that Bulgaria has made some progress on measures taken to address the CSRs of the Council Recommendation. On the positive side, the government has managed to achieve its medium-term objective for public finances, despite the slow economic recovery. In addition, the authorities took some steps towards improving tax collection and are currently implementing a major reform in the pension system. Only limited progress has been made in implementing the 2012 recommendations on

¹ COM(2012) 750 final.

² COM(2012) 751 final.

³ 13 in-depth reviews were published on 10 April 2013. While selected for an in-depth review in the AMR, Cyprus was ultimately not reviewed under the Macroeconomic Imbalance Procedure in view of the advanced reparations for a financial assistance programme.

the labour market, education, public procurement and the energy sector, as no substantial measures have been adopted in these areas.

Challenges identified in July 2012 and reflected in the AGS remain valid. Bulgaria's most pressing challenges are in the labour market, education, healthcare, the business environment, public procurement, energy and resource efficiency. Lower potential growth poses a number of challenges for the labour market and highlights the importance of boosting productivity and efficiency through structural reforms. A major challenge with respect to growth-enhancing macroeconomic policies is fostering the economy's innovation capacity by supporting investment in higher value-added production and services. This would be helped by creating a more favourable business climate (including for foreign investors and service providers) and by improving the absorption of EU funds.

The policy plans submitted by the national authorities are relevant. Bulgaria confirms its existing strategies, which focus on sound public finances, increasing investment in infrastructure and the absorption of EU funds across sectors, and improving the business environment and public administration. However, reforms, particularly in the labour market, education and the energy sector, lack the ambition needed to address the challenges in a comprehensive way.

2. ECONOMIC DEVELOPMENTS AND CHALLENGES

2.1. Recent economic developments and outlook

Recent economic developments

The recovery has been slow over 2010-12, reflecting not only global economic headwinds but also the deleveraging process following a markedly strong economic boom and a sudden stop of capital inflows. Preliminary GDP data for 2012 indicates growth slowing to 0.8% in annual terms, down from 1.8% in 2011. While the initial phase of the economic recovery over 2010-11 was driven by exports, net exports turned negative in 2012 and domestic demand took over as the main growth driver. The labour market has remained remarkably weak, with employment declining by 3.4% in 2011 and over 4% in 2012. Unemployment edged up to 12.3% of the labour force in 2012 and long-term unemployment continued to increase (6.8%). In particular, young people and the low-skilled face considerable challenges on the labour market.

Economic outlook

According to the Commission 2013 spring forecast, GDP growth is projected to recover gradually to 0.9% in 2013 and to 1.7% in 2014. Domestic demand is expected to be supported by a stable domestic economic environment, easing financing conditions and relatively strong public finances upholding consumer confidence. Investment would benefit from public sector projects funded by the EU and improved private sector confidence. While exports are forecast to recover in line with EU markets, imports are set to grow slightly faster due to the revival of consumption and investments. Hence, net exports are envisaged to continue contributing negatively to growth over 2013-14, while the external balance is projected to slide into a deficit of 3.6% of GDP by 2014.

The recovery in employment is held back by weak economic activity, skill and geographical mismatches, and high long-term unemployment. The labour market is therefore forecast to embark on a sluggish recovery only after 2014, therefore dampening the upturn in GDP growth. HICP inflation slowed considerably to 2.4% on average through 2012 and is expected to moderate to 2% in 2013 following a reduction in some administered domestic energy prices and pick up to 2.6% in 2014.

The economic scenario underlying both the national reform programme (NRP) and the convergence programme is plausible for the 2013-14 period. It projects real GDP growth of 1.0% in 2013 and 1.8% in 2014, which is broadly in line with the Commission 2013 spring forecast. The programmes do not include the estimate of the macro impact of the structural reforms.

2.2. Challenges

Bulgaria faces a set of interrelated policy challenges to achieve sustainable robust growth. Structural rigidities and financing constraints continue to hinder full recovery in the post-crisis environment. Despite an improving external balance, mainly as a result of protracted weakness in domestic demand, a strongly negative net international investment position points to further deleveraging ahead. Companies remain exposed to very high debt levels and non-performing loans have increased. Falling employment, especially in labour-intensive sectors, has supported apparent improvements in labour productivity, yet continuing rapid growth in unit labour cost weighs on competitiveness. A persisting lack of institutional capacity causes critical delays in reforming the labour market, education, the business environment, energy and transport, leading to a loss of investment and convergence opportunities. Bulgaria was invited to tackle these challenges in last year's CSRs and the significance of such challenges was again underlined in the AMRAGS.AGS, the 2012 AMR and the 2013 in-depth review (see Box 1).

Investment is essential to generate productivity gains over the long term, but structural aspects of the business and competition environment keep holding back investors. Businesses would benefit from improvements in tax administration, the streamlining of insolvency procedures and contract enforcement, as well as from full implementation of the Point of Single Contact and e-government solutions. According to the EU Justice Scoreboard,⁴ the perceived independence of justice in Bulgaria ranks third worst in the EU. This can deter investments as the independence of the judiciary ensures the predictability, certainty, fairness and stability of the legal system in which businesses operate. Significant economic benefits of effective procurement practices (including greater transparency, faster procedures and more competition) are currently not being fully exploited.

Better functioning markets, along with effective oversight by regulatory and supervisory authorities, could enhance competitiveness. In particular, high dependency on imported energy, limited competition among energy suppliers, insufficient interconnections with neighbouring countries and an inadequately functioning energy market have to be urgently addressed. The business environment and competitiveness also suffer from high energy

⁴ COM (2013) 160.

intensity, low energy efficiency and deficient environmental infrastructure. Water and waste management remain inefficient, with leaking water distribution systems, overuse of landfills and insufficient waste recycling. Underdeveloped transport infrastructure restrains the mobility of goods and factors of production. Broadband take-up and coverage is low, particularly in rural areas. Inefficient absorption of EU funds and limited administrative capacity in these sectors continue to be key growth bottlenecks. Bulgaria also fails to tap the growth potential stemming from innovation activities, as private sector participation is limited, while public research expenditure is very low and only a small part is allocated competitively. Finally, access to finance for small and medium-sized enterprises (SMEs) remains inadequate.

Bulgaria suffers from a below-average and declining employment rate and high unemployment disparities across regions and population subgroups. The country experienced one of the sharpest drops in employment in the EU over 2008-12, with the employment rate in the 20-64 age group declining by more than 8 percentage points. Low-skilled workers were most severely hit by the crisis and the subsequent restructuring, with the employment rate for this segment falling considerably. Many of the low-skilled unemployed belong to ethnic minorities, in particular Roma with no education or work experience.⁵ The EU's highest rate of young people not in employment, education or training (NEETs) (22.4% in 2011) and the highest level of discouraged workers among inactive NEETs point to serious structural problems; these are reinforced by the still insufficient quality and coverage of the Employment Agency. Skill mismatches, in particular in technical competences (given the disproportionately high number of graduates in social sciences, business and law), indicate a need for a better link between education output and labour demand.

Bulgaria has a high proportion of workers retiring before the statutory retirement age through invalidity pensions. A challenge will be to ensure that workers stay longer on the labour market, thereby contributing to more adequate pension entitlements.

Bulgaria is facing the challenge of improving the overall quality and efficiency of the education and training system to ensure the availability of a qualified labour supply and mitigate the expected decline in potential growth. The low educational achievements in basic skills are linked to poor education provision combined with a lack of performance incentives for teachers, curricula in need of modernisation, a poor national assessment system and insufficient accountability. Bulgaria has the EU's highest share of low achievers in reading, mathematics and science (according to PISA 2009), suggesting that there are significant structural obstacles to ensuring quality education. The country's overall investment in education and training, and specifically in primary and secondary education and in early childhood education, are well below the EU average. Use of childcare is particularly low (for those under three years old) and has been decreasing since 2008.⁶

The health sector faces major difficulties in meeting the population's health needs. The main challenges are the lack of transparency in hospitals' financing, the poor access for some social groups and regions to health services and the disproportionately high level of out-of-

⁵ According to the UNDP/World Bank/EC Regional Roma survey 2011, over 50% of active age Roma are unemployed and over 65% of 15-24 year old unemployed Roma have no work experience at all.

⁶ Bulgaria Country Fiche on Gender Equality and Policy Developments (ENECE, 4th Quarter 2012).

pocket payments in health. An increase in the quality of public spending in the health sector is crucial to improving the population's health and reducing the pressure of recurrent expenditure overruns.

Poverty and social exclusion indicators highlight a number of worrying trends. Bulgarian citizens are exposed to the highest risk of poverty or social exclusion in the EU (49.1% in 2011, almost twice the EU average). The risk of poverty recorded the highest increase in 2011 as compared with 2010 and this was accompanied by a rise in the poverty threshold and larger inequality in income distribution. Particularly worrying are the rates of material deprivation for people up to 18 years of age and those over 65 years old, the latter highlighting the challenge of improving the adequacy of pensions. Social assistance schemes are ineffective in supporting the inclusion of those further from the labour market.

Box 1 Summary of the 2013 in-depth review (IDR) under the Macroeconomic Imbalances Procedure (MIP)

The first in-depth review of the Bulgarian economy concluded that Bulgaria was experiencing macroeconomic imbalances, in particular as regards developments relating to external indebtedness, corporate sector deleveraging and the labour market adjustment process. On this basis, the Alert Mechanism Report (AMR), published in November 2012, suggested that it was appropriate to conduct a second in-depth review to examine further the persistence of imbalances or their unwinding. The review has focused on analysing in detail the recent developments and expected future prospects of the identified imbalances. The main observations are:

- **Bulgaria's external position remains highly negative, although recent developments go in the right direction.** The current account has remained largely balanced over the last three years, allowing for a reduction of external debt as share of GDP. The negative income balance of the current account has been offset by positive current and capital transfers, related to rising remittances and the absorption of EU structural funds. Future risks to the external position lie in a return to excessive current account deficits when economic conditions normalise, especially if those deficits are driven by consumption and non-productive investments (e.g. real estate). The external position seems only moderately vulnerable to sudden shocks to the economy, as a large part of the indebtedness comes from foreign direct investment and long-term debt.
- **On the private sector side, non-financial corporations remain vulnerable despite the ongoing deleveraging process.** The high level of debt, combined with rising non-performing loans and an increasing 'other payables' account balance, indicates that deleveraging pressures are expected to persist for a while and are probably impeding economic activity at present. Late payment and debt restructuring procedures in the sector deserve attention and could facilitate the gradual reduction of indebtedness.
- **The labour market has been hit disproportionately hard by the crisis.** Companies have opted to shed labour rather than reduce wages, causing one of the largest drops in employment in the EU. Job losses were especially large in the low-skilled segment of the market. Both overall and long-term unemployment have increased markedly, suggesting that a large part of the current unemployment could become structural in nature.
- **Notwithstanding gains in export market share, concerns over losses in cost-competitiveness remain.** Non-cost factors, including quality improvements made by export-oriented industries, have been identified as the main contributor to market share gains. Nevertheless, unit labour cost (ULC) growth, while having come down, remains above that of Bulgaria's industrial competitors. This is likely to weigh on competitiveness, thus compromising export performance.

The in-depth review also discusses possible policy avenues to address the challenges identified in the analysis. The business climate could benefit from further reduction of administrative costs and red tape and improved efficiency of the judiciary to ensure a level playing field. Improving the business environment would allow Bulgaria to attract more investments in productive sectors and grow out of its external indebtedness in the medium and long term through increases in economic output. Streamlining the in- and out-of-court debt restructuring and debt settlement procedures could increase business confidence and reduce uncertainty in the corporate sector. Effective implementation of the late payments regulation would relieve cash flow concerns and help quantify arrears on payments for goods and services between non-financial corporations. Measures targeting higher education, youth employment and reintegration of the low-skilled in the labour market may be considered to address the high level of long-term unemployment. In addition, a careful examination and possible recalibration of the system of minimum social security thresholds may benefit the threshold-setting mechanism and prevent adverse effects on the more vulnerable parts of the labour market.

3. ASSESSMENT OF POLICY AGENDA

3.1. Fiscal policy and taxation

Budgetary developments and debt dynamics

The main goal of the 2013 convergence programme's medium-term budgetary strategy is to keep the structural balance close to the MTO. The programme defines the medium-term objective (MTO) as a structural deficit of 0.5% of GDP. This nationally set MTO more than adequately reflects the requirements of the Stability and Growth Pact. However, while the MTO was already achieved in 2012, as also recommended by the Council Recommendations of 10 July 2012, the programme foresees a weakening of the structural balance,⁷ settling to 0.7-0.8% of GDP in 2013 and over the rest of the programme horizon until 2016. The structural fiscal position thus weakens, but stays close to the MTO. The programme states that it expects the MTO to be met in 2017, but the actual numeric projections in the programme extend only until 2016. In nominal terms, after a temporary budgetary loosening in 2013, the deficit is set to improve gradually from 1.3% of GDP in 2013-14 to 0.8% of GDP by 2016.

In 2012, the fiscal position continued to strengthen and the budgetary outcome was significantly better than expected in the previous convergence programme. The general government headline deficit narrowed from 2% of GDP in 2011 to 0.8% in 2012, well below the target of 1.6% of GDP set in the previous programme. This improvement was largely driven by lower-than-planned investment expenditure. However, the unrealised investment expenditure might be carried over to the following years.

In 2013, the convergence programme projects the fiscal position to revert back to a deficit of 1.3% of GDP. This 2013 deficit projection has remained unchanged from the previous year's programme. Given the better-than-expected outcome in 2012 and thus a lower expenditure base, the current fiscal plans imply a slight fiscal stimulus in 2013, albeit

⁷ Cyclically adjusted balance net of one-off and temporary measures, recalculated by the Commission services on the basis of the information provided in the programme, using the commonly agreed methodology.

following a stronger-than-planned fiscal consolidation in 2012. The Commission spring forecast also projects the same fiscal outcome for 2013. The deficit is set to weaken from the previous year on account of expenditure increases. Notably, pensions have been increased by 9.3 % on 1 April 2013 and the 2013 state budget provides for increased investments.

The latest convergence programme has somewhat loosened the forward-looking fiscal targets as compared with the previous programme. Instead of aiming to achieve headline and structural fiscal balance by 2015, the new programme projects the headline deficit to improve more gradually from 1.3% of GDP in 2013-2014 to 1% of GDP in 2015 and 0.8% in 2016. This weaker outlook is explained by a significant downward revision of the underlying macroeconomic scenario for both the EU and Bulgaria. The recalculated structural deficit is projected to remain relatively stable at 0.7-0.8 % of GDP over the programme period.⁸ The primary balance (net of interest payments) reaches zero by 2016.

While the headline deficit is set to improve gradually, both the revenue- and expenditure-to-GDP ratios are expected to increase by 0.6 pps between 2012 and 2016.⁹ The programme projects an increase in revenues driven by higher VAT and excise revenues, even though the tax rates are planned to remain largely stable.¹⁰ The increase in VAT revenues as a share of GDP is due to an assumed continuation of a consumption-led economic recovery, with private consumption and investments outpacing overall GDP growth. Also, the programme assumes a continuation of the trend of gains in the efficiency of revenue collection in 2013, boosted by measures to fight tax evasion. The rise in the expenditure ratio is explained by significantly increasing capital expenditure as compared with 2012, which is partly offset by curbing other expenditure items (see annex: Table 3). Overall, the programme plans to reallocate expenditure towards growth-enhancing items, notably investments. These fiscal projections are supported by detailed measures only for 2013, and occasionally by their carry-over impact to 2014 (see Box 2). For the period 2014-16, the budgetary adjustment represents projections under a no-policy-change assumption. There are no significant one-off or other temporary measures planned in the programme.

Assessed against the deficit projections in the Commission 2013 spring forecast, the deficit projections of the programme for 2013-14 appear realistic. The macroeconomic scenario of the programme (including the inflation and employment projections) is broadly in line with that of the Commission services. Given the similar baseline macroeconomic scenarios, the programme and the Commission forecast are subject to similar risks. As mentioned in the Bulgaria section of the Commission 2013 spring forecast, there is a risk to the baseline macroeconomic scenario from a potentially weaker-than-expected recovery in household consumption, given the still fragile consumer sentiment and a weak labour market.

⁸ While the weaker cyclical position of the economy should in theory not impact on cyclically-adjusted structural balances, their estimates were also lowered compared to the previous programme. This is due to a downward revision of potential growth estimates given the slower recovery in employment and investments. This in turn impacted the output gap estimates and the cyclical component used for the calculation of the structural budget balance.

⁹ For 2013, the Commission forecast expects both lower revenues and lower expenditures. This is due to a more conservative assumption of EU structural funds absorption in that year, which implies both lower revenues and expenditures and is thus broadly deficit-neutral.

¹⁰ Some excise taxes were raised in 2013, but with a relatively small budgetary impact of 0.04 % of GDP.

Since the programme projections rely on an assumption of a consumption-led tax-rich economic recovery driving strong VAT revenues, the materialisation of this macroeconomic risk would jeopardise the revenue targets. In addition, the assumption of the programme that the trend of improving tax compliance would continue in 2013 entails some risks. On the expenditure side, the unreformed healthcare sector, which has led to recurrent expenditure overruns in the past, could continue to put pressure on the fiscal balance. In terms of implementation risks, the budgetary targets could be altered by a new government following the early parliamentary elections in May 2013. However, at the time of writing the current assessment, there are no indications of a change in fiscal policy. Overall, the authorities have a proven track record of meeting and even over-performing their targets in the past, which would partially offset the above-mentioned risks.

Measured against the recalculated structural balance, Bulgaria reached its MTO (-0.5 % of GDP) in 2012, but the structural position is set to weaken slightly in 2013-14, albeit remaining close to the MTO. The programme foresees a weakening of the structural deficit from 0.4 % of GDP in 2012 to 0.7 % of GDP in 2013, then slightly further to 0.8 % in 2014 and to fluctuate between 0.7-0.8 % of GDP over the programme horizon. The Commission services' forecast projects a slightly weaker structural deficit (by 0.1 % pps of GDP) in 2013-14. According to the information provided in the programme and in the Commission services' forecast, the growth rate of government expenditure, net of discretionary revenue measures, in 2013-15 would not exceed the relevant reference medium-term expenditure benchmarks, which are estimated at between 2.1-2.6 % for those years. Although in 2016 the expenditure benchmark is projected to be breached, this does not lead to any significant weakening of the structural balance.

In 2012, Bulgaria recorded the second-lowest debt ratio among EU Member States, with general government gross debt at 18.5 % of GDP, well below the 60 % Treaty reference value. The programme projects the government debt to peak at 20.4 % of GDP in 2014 and then to abate to below 20 % of GDP in 2015-16. The underlying debt dynamics reflect the positive impact of a gradual improvement in the primary balance and increasing nominal GDP growth. The projected debt ratio fluctuates slightly from year to year over the programme period, reflecting the planned repayment and refinancing operations of some larger bonds in certain years (notably a single large bond maturing in early 2015). The projections of the debt-to-GDP ratio in the programme appear plausible taking into account the Commission 2013 spring forecast and the latest available information. Since the debt-to-GDP ratio is below the reference rate, the debt reduction benchmark is not applicable. Medium-term debt projections (Graph below Table V in annex) indicate that the full implementation of the programme would lead to a smaller debt-to-GDP ratio by 2020.

Box 2. Main measures

The box provides an overview of all discretionary measures with a significant budgetary impact as well as macro-structural measures mentioned in the Convergence Programme/National Reform Programme. The main budgetary measures for 2013 include: on the revenue side, (i) increasing the tax rates on some energy products, (ii) raising the minimum and maximum mandatory social security income thresholds and (iii) applying income tax to interest income on deposit accounts. In addition, the programme expects a comprehensive set of measures to fight tax evasion, instituted over the

previous years, to boost VAT and excise tax revenue collection by 0.2% of GDP in 2013. On the expenditure side, the main measures are (iv) increasing pensions on average by 9.3%, which also compensates for the temporary halt in pension indexation over 2010-12, and (v) boosting public investments, related to the EU funds absorption cycle. For 2014, some of the revenue measures have a carry-over effect, but their overall size is relatively small. The only notable revenue measure specified for 2014 is increasing excise on natural gas (0.06% of GDP). For 2015-16, the programme does not provide details of specific measures and is largely based on an assumption of stable tax rates. However, the pension reform of 2011 is projected to have an effect over the medium and longer term, with the gradual increases in the pension age keeping the growth of pension scheme expenditures below GDP growth. Therefore, the programme expects the ratio of pension expenditure to GDP to drop by 0.5 pps over 2013-16.

Main budgetary measures

Revenue	Expenditure
2013	
<ul style="list-style-type: none"> • Increase of the mandatory minimum and maximum social security income thresholds (0.1 % of GDP) • Increase of excise tax rates on some energy goods in line with EU harmonisation requirements (0.04 % of GDP) • A wide set of measures to improve VAT and excise tax compliance is expected to yield 0.2 % of GDP 	<ul style="list-style-type: none"> • Increasing pensions by 9.3%, and raising minimum and social pensions (total increase 0.6% of GDP) • Increase of EU funding related investments, which will impact the budget balance through national co-financing expenditure (the exact budgetary impact is not specified in the programme) • Increase of the retirement age by 4 months (the exact budgetary impact is not specified in the programme)
<p><u>Note:</u> The budgetary impact in the table is the impact reported in the programme, i.e. by the national authorities. A positive sign indicates that revenue/expenditure increases as a consequence of this measure. The degree of detail reflects the information made available in the convergence programme and, where available, in a multiannual budget.</p>	

The 2013 National Reform Programme describes a number of macro-structural reform measures in the areas of public administration, health, employment, social inclusion, education, energy, and research and development with the overall objective of raising employment and boosting potential growth. However, the programmes do not provide a quantitative estimate of their budgetary impact on an annual basis. The larger part of the reform funding is accounted for by the EU funds.

Long-term sustainability

Bulgaria does not appear to be facing a risk of fiscal stress in the short term, and does not appear to face medium-term or long-term sustainability challenges either. Government debt (18.5% of GDP in 2012, expected to rise to 20.3% in 2014) is well below the Treaty threshold (60% of GDP). Hence, the low debt ratio provides time to adjust policies that affect age-related spending.

Recent reforms to the pension system have further reduced the sustainability risks, and need to be accompanied by improvements in labour market conditions that allow older workers to stay longer in employment. Further containing the growth of age-related expenditure would contribute to the sustainability of public finances in the long term. According to the 2012 Ageing Report,¹¹ projections for healthcare and long-term care are rather favourable. Conversely, health status indicators are weak in comparison with the other Member States, pointing to higher needs for healthcare and long-term care needs, and therefore potentially higher costs, in the future.

Fiscal framework

Bulgaria has substantially strengthened its fiscal framework in recent years. Reforms in the field of numerical fiscal rules and medium-term fiscal planning have contributed to maintaining fiscal discipline and increasing fiscal policy predictability. The fiscal targets were met and even outperformed, while sizeable fiscal buffers were maintained. With a view to complying with EU Directive 2011/85/EU on national budgetary frameworks and preparing the implementation of the Fiscal Compact,¹² a new public finance law was adopted in January 2013 (to enter into force in January 2014). The new law retains the existing numerical fiscal rules (including a nominal ceiling of 3% of GDP for general government deficit in ESA 95 terms and 2% for the Consolidated Fiscal Programme (CFP),¹³ and an expenditure ceiling of 40% of GDP for the CFP). It further strengthens requirements at the municipal level by aligning public finance accounting and statistics with the Eurostat methodology and reforms the three-year medium-term budgetary framework. The existing rules are supplemented by additional ones related to the Stability and Growth Pact: a medium-term budget ceiling of 0.5% of GDP for the structural deficit and of 1% in case debt is under 40% of GDP, as well as a limit to expenditure growth below the forecast GDP growth, and an annual adjustment path of 5% in case public debt exceeds 60% of GDP. The Public Finance Act also requires the government to submit to parliament by mid-2013 a proposal on the establishment of an independent body whose mandate would include the monitoring of national numerical fiscal rules.

The authorities should maintain the reform momentum and prepare the ground for implementation of the new Law, in particular by establishing the envisaged independent fiscal body and giving it a clear mandate, functional autonomy and adequate resources. To further improve the content of the medium-term budgetary framework, the authorities should also provide more details on off-budget items which represent a potentially important contingent liability for the budget, such as losses and arrears of state-owned enterprises.

Tax system

¹¹ See http://ec.europa.eu/economy_finance/publications/european_economy/2012/2012-ageing-report_en.htm.

¹² Bulgaria has signed the Treaty on Stability, Coordination and Governance in the EMU, but not ratified it to date.

¹³ The Consolidated Fiscal Programme is a system of summary indicators from the budget of all first-level spending units, the central budget, the resources from EU funds and other indicators to calculate the budget balance.

The tax system is characterised by a low overall tax burden on labour and capital matched by relatively high taxation of consumption. This is suggestive of a rather growth-friendly tax structure. Bulgaria has the second lowest tax-to-GDP ratio in the EU (27.2% of GDP in 2011), reflecting a very low share of direct taxes and a high share of indirect taxes. Although revenues from energy taxes are the second highest in the EU, the implicit tax rate on energy, which relates the tax burden to overall energy consumption, indicates that they stem from the high energy-intensity of the economy rather than from high excise rates on energy products, which are in fact below average. Revenues from non-energy environmental taxes (transport excluding fuel, pollution and resource taxes) are below the EU average. The flat tax system, with its low rate and almost no tax deductions, makes Bulgaria's labour taxation rate one of the lowest in the EU. This applies to both the implicit tax rate on labour employed and the tax wedge.

In spite of a low tax burden on labour, the poor labour market performance points *inter alia* to taxation challenges for low-paid jobs. The minimum thresholds for the calculation of social contributions are very close to the average wage in some low-paid sectors and occupations. A cap at about three times the average wage and continued increases in the social payment floors, including during the crisis, imply a higher tax wedge for low-wage jobs. Furthermore, it appears that, especially for low-skilled jobs, the thresholds have not allowed for sufficient downward flexibility of wages in the current juncture, pricing some lower paid workers out of the labour market. The government decided to freeze the limits for some occupations for 2013, resulting in a lower average increase of the thresholds.

Improving tax compliance remains a key challenge in Bulgaria. Available estimates point to a considerable size of the shadow economy. This is confirmed by data for undeclared work in Bulgaria, which are far above the EU average. Bulgaria also seems to have a particular need to improve the quality of tax administration, as the administrative costs of revenue collection are above the EU average and the compliance costs of paying taxes are high. Efforts to strengthen tax collection have been directed towards an increased use of third-party information, with a new requirement for all fiscal retail devices and integrated computerised sales management systems to be remotely connected to the National Revenue Agency's information systems. The high compliance costs have been addressed somewhat by the streamlining of reporting requirements and reducing the number of payments for tax obligations. Nonetheless, these efforts do not seem to be supported by a comprehensive tax-compliance strategy, which would include a prior analysis of the most significant risks to tax collection and assessment of the measures already in place.

3.2. Financial sector

Macro-financial stability has been preserved since the outburst of the crisis. Bulgaria's financial sector is heavily bank-based and mostly foreign-owned. Banks managed to maintain their capital buffers and remain profitable despite significant loan-loss impairments, while their liquidity position has even improved. Banks' overall capital adequacy ratio (16.7%) and core tier-one ratio (15.2% at the end of 2012) remain above international averages. In parallel with its comfortable capital position, the banking system is also increasingly benefiting from domestic funding instead of relying on liquidity from parent banks. In 2012, resident deposits

grew by 9.4% in the context of almost stagnant credit growth of under 3%. This has resulted in the accumulation of extra liquidity as indicated by a declining loan-to-deposit ratio. However, the growth of loans that are more than 90 days overdue accelerated again in the first half of 2012 and by end-2012 these represented 16.6% of all loans.

The authorities stepped up supervision, while maintaining high regulatory standards and ensuring continued funding of foreign-owned banks by their parent institutions. Close monitoring of balance sheet developments, including regular stress-testing, should continue with a view to pre-emptively assessing solvency and liquidity risks. In particular, the evolution of non-performing loans, as well as banks' strategies for dealing with them, need to be followed closely.

Notwithstanding the stable financial sector, weak economic recovery continues to weigh on credit risk with negative effects on credit extension to the real economy. Credit growth is unlikely to resume soon, given the still highly-leveraged corporate sector (146% of GDP). With capital markets playing a weak role in intermediating savings and productive investment, equity financing remains very limited and the real economy effectively depends on financing from foreign-owned banks. While large and export-oriented companies seem to have little trouble in accessing credit, restoring normal lending to SMEs and thus avoiding an excessive pace of deleveraging that can be detrimental to growth are key policy challenges. EU-funded SME support programmes remain largely untapped and Bulgaria has made limited progress in increasing the availability of credit to SMEs.

3.3. Labour market, education and social policies

Still rising unemployment (from 11.3% in 2011 to 12.3% in 2012) **is to a large extent driven by the weak post-crisis recovery, while disadvantaged people bear the brunt of the adjustment process.** From a demand-side perspective, the feeble economic environment continues to weigh on the labour market, but long-standing structural challenges on the supply side further exacerbate the current situation. The predominance of job cuts over wage cuts is especially problematic for disadvantaged people in the labour market and sectors with the least capacity for finding alternative employment. High structural unemployment (6.8% in 2012) may already be pushing up wages and ULCs in some sectors that have recovered from the crisis. Furthermore, high unemployment among the low-skilled and young people (28.5% and 28.2% respectively in 2012) partly reflects persistent skill and regional mismatches as well as the low quality and low relevance to labour market needs of the education and training systems. Amid risks of locking the economy on a low-growth path, low employment rates also result in a persistent and significant share of the population becoming vulnerable to poverty and social exclusion.

In 2012, the Council Recommendation for Bulgaria contained CSRs concerning unemployment, social exclusion, education and pension reform. The authorities were urged to tackle high levels of youth unemployment by increasing the scope and efficiency of active labour market policies (ALMP), improving work incentives and strengthening the Employment Agency for providing better services. In addition, the authorities were invited to improve the effectiveness of social transfers and access to quality social services, ensure a

stronger contribution of the education system to human capital formation at all levels as well as reduce risks to the sustainability, and improve the adequacy of the pension system.

The existing schemes to promote youth employment have failed to reach those most in need. The need to tackle the weak labour market participation of young people was identified in a 2012 CSR for Bulgaria and highlighted as a general priority in the AGS. Under the national ‘Employment for Youth’ initiative,¹⁴ Bulgaria has committed itself to reduce the youth (15-24 years) unemployment rate to 23 % and the share of young NEETs to 19 % by the end of 2013. Nevertheless, an integrated approach for youth policies is still lacking, hampering the successful delivery of the Youth Guarantee.¹⁵ Given that almost one young person in four is neither involved in the labour market nor in the education system, the pool of NEETs is proposed as the main target group. Two European Social Fund (ESF) operations launched in the second half of 2012, ‘First Job’ and ‘New Workplace’, are supporting efforts to boost youth employment. Both operations address the needs of unemployed people below 29 years of age by providing incentives to employers. The tangible outcomes of these schemes are to be monitored closely, if necessary to refocus resources on those actions which generate the highest returns in terms of job creation. Draft amendments to the Labour Code on internship contracts for young graduates with secondary or tertiary education are at an advanced stage of adoption. The measures planned in this area are relevant, but they do not sufficiently differentiate among the needs of young people with diverse levels of education and socio-economic backgrounds. Nevertheless, lasting ambitious solutions to the lack of apprenticeships and appropriate transition paths from education to employment are necessary in order to ensure a fully adequate response and overcome the systemic weaknesses.

Only limited progress has been made on improving the performance of the Employment Agency (EA), as recommended in 2012. In the context of increased skill and regional mismatches on the labour market, as well as high (long-term) unemployment, the efforts to reinforce the EA’s administrative capacity had a limited effect on the quality of services provided (i.e. insufficient provision of relevant information, lack of personalised approach, insufficient number of Roma mediators, and inadequate level of competence at regional/local level). In addition, reforms aimed at addressing unemployment among low-skilled persons have not taken place so far. Also, the government has not managed to set up a task force on forecasting skills needs. The public work scheme remains ineffective in ensuring (re-)entry to the open labour market. Some of these commitments have already been postponed for several years and were not sufficiently ambitious in view of the worsening labour market situation. Active labour market policies fall short of what is needed to prevent structural unemployment from weighing on labour supply and pushing up wages in growing sectors. This makes it more difficult for Bulgaria to reach the Europe 2020 employment target.

The current pension reform aims to boost labour market supply but further measures are needed to improve the adequacy of pensions. The government has already advanced

¹⁴ Drawn up and adopted in response to the Europe 2020 strategy and the Commission’s Youth Opportunity Initiative.

¹⁵ Council Recommendation of 22 April 2013 on establishing a Youth Guarantee (2013/C 120/01) to ensure that all young people under the age of 25 receive a good-quality offer of employment, continued education, an apprenticeship or a traineeship within four months of becoming unemployed or leaving formal education.

some of the pension reforms by increasing the statutory retirement age and the minimum contribution periods and retirement age for specific schemes (i.e. for police and army personnel). The reforms are a step in the right direction, but increasing the number of contributors is key to improving pensions. Both in the short and the longer term, as the statutory retirement age increases, efforts to prevent early exit from the labour force should be maintained by increasing incentives to stay in work and adopting measures to improve the employability of older workers and to tackle barriers employers may face regarding older workers. Although changes have been made to specific schemes as regards the required contribution period and retirement age, such pensions are still available from what can be considered a young age (from 42 to 52), particularly given increasing life expectancy. There are still no plans to bring the pensionable age for women into line with that for men. According to the available data, disability benefits are increasing and additional measures are needed to avoid abuses of the invalidity pension system.

Education and healthcare

The adoption of the new School Education Act, as recommended in 2012 is expected for the second half of 2013 following the constitution of a new national assembly. Pending adoption of the new School Education Act, critical measures aimed at further adapting the education and training systems, such as new curricula for general education, cannot be implemented. Curricula have been modernised under ESF co-funded projects, with a package of 60 curricula covering all subjects for general education having already been completed. The upgrading of the qualifications of pedagogical specialists and teacher training are delivered under a national programme and a complementary training programme co-funded by the ESF. Another current project, also co-funded by the ESF, addresses disadvantaged people's access to education by assessing their needs and providing support in pilot schools for children with disabilities. There is a need to enhance access to inclusive mainstream education for disadvantaged people, including Roma.

Higher education faces persisting challenges in responding better to labour market needs (employment levels of young graduates deteriorated to 57.5% in 2011) **and raising innovation potential in the economy.** The existing financing and structure of the higher education system, including the degree of specialisation, and suboptimal incentives at the institution level, as well as for individual teachers and researchers, contribute to the gap between educational output and demand. Bulgaria has addressed the 2012 CSR on higher education (upper/post-secondary and tertiary) mostly by initiating the process of modernising the curricula for higher and vocational education. Calls for proposals have been issued and 80% of all university students are expected to have modernised curricula by the end of 2014. Curricula for vocational education will be modernised in partnership with employers. However, there are no further plans to amend the Law on Higher Education. While the efforts made show that some of the challenges are being addressed, close attention needs to be paid to adopting and enforcing reform laws as well as carefully monitoring their impacts. The reform of higher education needs to be accompanied by effective governance and investment, in particular in the professional development of higher education staff, and a comprehensive set of education and labour market measures may be necessary to address the skills mismatch and labour shortages in some sectors.

The healthcare system is not providing the right combination of services, as a result of inefficiencies in the allocation and use of resources. Although projections of public health spending due to population ageing do not point to a significant burden on public finances in the medium-to-long term, inequalities between social groups and regions as regards access to, and quality of, healthcare are long-standing challenges. With one of the highest numbers of hospital beds per capita among the new Member States, Bulgaria also faces enormous challenges in the rationalisation and management of the hospital sector. Some steps have been taken on the e-Health programme and the National Hospital Map was approved in line with the objectives of the 2012 CSR, but implementation remains blocked. A lack of administrative capacity in the healthcare sector hampers efforts to establish appropriate strategies and deliver high-quality projects, thus limiting the absorption of EU funds. The public financing system provides no incentives for efficiency in service provision, with no real competition between hospitals. A more transparent system of pricing in healthcare services would contribute to growth and competitiveness in the sector. A thorough overhaul of the system is needed if it is to function efficiently and address citizens' health needs.

Poverty reduction

The deterioration of social and labour market conditions has taken Bulgaria further away from the national target of reducing the number of people at risk of poverty and/or social exclusion by 260 000 persons (by 2020). In February 2013, the government adopted the 2020 National Strategy for Combating Poverty and Social Exclusion to address all challenges (income support, access to services and active labour market measures, access to healthcare and education, etc.) in a comprehensive manner. The Strategy frames a wide-ranging set of priorities underpinned by relevant measures (i.e. supporting training for unemployed persons, addressing the adequacy of pensions and social transfers, providing impact assessments for employment, income, social, health and education policies). Implementation of the Strategy rests on the timely finalisation of the action plan and its subsequent funding.

Social transfers have, so far, had little effect in fighting poverty (in 2011, the shares of the population at risk of poverty before and after social transfers were 27.1% and 22.3% respectively). The proportion of the population covered as well as adequacy, replacement and take-up rates (in particular for means-tested benefits) are low — a further indication of the reduced efficiency of social transfers. The activation potential of social benefits in supporting those further from the labour market remains limited. Although the authorities have, for several years, pursued a welfare adjustment policy focused on increasing the lowest pensions, the elderly still face high income-poverty and social-exclusion risks. As to improving access to quality social services for children and the elderly, progress is not convincing. The government has proactively continued the transition from residential to community-based care for children deprived of parental care and intends to develop similar services for the elderly. Restructuring the existing system without having in place a completely developed set of new community-based services, together with inadequate staffing, poses risks to the sustainability of reforms in this area. Moreover, few steps have been taken to support access to quality, affordable early childhood education and care services, which have an essential role in supporting children's development whilst breaking the cycle of disadvantage.

The National Roma Integration Strategy (NRIS) has moved ahead with pilot initiatives in several municipalities, but overall implementation is slow. The underlying approach is to support integrated interventions (combining measures on employment, education, health and housing) at municipal level. On education, measures aim to reduce early-school leaving by improving social services in schools and cooperation between schools and parents, as well as creating early-childhood infrastructure. However, the action plan accompanying the NRIS and detailing concrete measures and budgetary commitments — a necessary precondition for putting the Strategy into practice — has yet to be enforced. In addition, despite the fact that municipalities have been asked to draw up local action plans to step up Roma integration, the link between these plans and the NRIS is missing and local authorities have not been provided with additional resources or support to draw up and implement the action plans. NGOs could also be given a greater role in planning mainstream measures with an important impact on Roma. Finally, there is no progress so far in setting up a robust national monitoring mechanism for measuring the impact of the NRIS on the situation of the Roma and compliance with the targets that have been set.

3.4. Structural measures promoting growth and competitiveness

Despite the positive developments in terms of fiscal and financial sector stability, the economy has not been able to benefit fully from the global rebound in the post-crisis environment. Past gains in export market shares have turned out to be short-lived, pointing to persisting concerns over cost and non-cost competitiveness. The significant impact of large labour shedding on apparent labour productivity gains has masked one of the fastest growing unit labour costs in the EU (and one which is above those of Bulgaria's industrial competitors). As a small open economy, the country depends on foreign financing to fuel its output growth. Hence, improving the business environment and infrastructure, particularly as regards energy and transport, strengthening innovation and absorbing available EU funds are essential to further enhancing Bulgaria's growth potential.

In 2012, the Council Recommendation for Bulgaria contained CSRs concerning a business-friendly environment, enhanced public administrative capacity and well-functioning energy markets.

Business environment

Bulgaria has made some limited progress in improving the business environment. Starting a business became easier with a drop in the cost of registration (percentage of income per capital) from 1.5 % in 2011 to 1.1 % in 2012.¹⁶ The amount of time needed to pay taxes was also reduced (from 500 hours in 2011 to 454 in 2012), but it remains much higher than in peer developing countries (in Eastern Europe). The amount of time needed to complete import/export procedures has improved (from 21/23 days in 2011 to 17/21 days in 2012), but insolvency procedures remain cumbersome in terms of costs, recovery rates and the time needed to close a business (3.3 years on average).

¹⁶ World Bank (2013): *Doing Business: Bulgaria*.

Although various action plans to improve the business environment are in progress, companies and citizens do not yet see a significant improvement in public services. In June 2012, Bulgaria adopted a second Action Plan to reduce the administrative burden (for 2012-14). As of end 2012, 49 of 167 measures were already in force. Amendments to the corporate and personal income tax laws (effective from January 2013) are expected to further ease the procedures for the declaration and payment of taxes for businesses. In particular, the threshold for quarterly advance payments of corporate income tax was increased and a single bank account for the payment of both taxes and social security contributions was introduced as of 1 January 2013. The scope of e-services provided by the National Revenue Agency has been broadened and the use of online forms has increased (the number of tax returns sent via the internet has more than doubled since 2009, albeit from low levels).

Efforts to reduce the administrative burden for service providers could be boosted by improvements to the Point of Single Contact (PSC), which is a part of the e-government portal. The potential of the PSC in terms of efficiency gains, reduced transaction costs and time, and savings for the public administration is far from being fully realised, as implementation is highly unsatisfactory. In particular, the assignment of responsibilities within public administration departments is unclear and there is no proper system of cooperation between competent authorities. This affects the availability and quality of information provided by the PSC and restricts the online completion of procedures, making business set-up and operation cumbersome. Estimates¹⁷ suggest that further procedural streamlining in PSC could contribute growth of up to 0.2-0.3 % of GDP in the medium to long term. Additional growth could come through a more ambitious implementation of the Services Directive, which, according to an economic study,¹⁸ has the untapped potential to add up to 1.0 % of GDP to the impact of the measures already implemented. In particular, Bulgaria should focus on removing unjustified or disproportionate requirements in some sectors (such as construction and professional services), and generally seek to simplify administrative procedures.

Research and innovation

A significant burden on the Bulgarian economy in the global competitive context is the low level of research and innovation (R&I). Both remain underfunded, underperforming and in need of radical reform. Although R&I expenditure has increased slowly (to 0.6% of GDP in 2011), it falls significantly short of Bulgaria's 2020 target of 1.5% of GDP. The funding of specific fields of research is not prioritised in the national strategy and more funding needs to be allocated competitively (currently this applies to around just 10% of funding) and transparently. The ranking of universities (launched in 2010) provides the government with a tool for performance-based allocations but not enough use is made of it.

There are only very limited frameworks for supporting collaboration between research establishments, universities and the private sector on innovation, and public policies are not fostering enough long-term sustainable partnerships between innovators. Following

¹⁷ *The economic impact of the Services Directive: A first assessment following implementation*, see http://ec.europa.eu/economy_finance/publications/economic_paper/2012/ecp456_en.htm.

¹⁸ *The economic impact of the Services Directive: a first assessment following implementation*, see http://ec.europa.eu/economy_finance/publications/economic_paper/2012/ecp456_en.htm.

the adoption (in 2011) of the National Strategy for Scientific Research to 2020, the government promised a new Law on Innovation in 2012 to create an effective and up-to-date innovation framework. The Law has yet to be adopted. In addition, public policy tends to be unpredictable and there is often a lack of consistency between multi-annual strategy documents. R&I administration is fragmented and the cooperation between the two national instruments (the Innovation Fund and the Science Fund) remains inefficient. Further measures are needed to facilitate the structural change towards knowledge-intensive industries and to promote eco-innovation. The first science and technology park in Sofia, co-financed by the European Regional Development Fund, deserves support to grow into a core R&I hub.

Energy, environment and climate change

High gas import dependency coupled with supply dependency on one source and an inefficient energy market (market concentration reaches 97%) expose Bulgaria to significant supply shocks and relatively high gas prices.¹⁹ The gas interconnections with Romania, Greece and Serbia are already at various stages of implementation and their completion without further unnecessary delays would ensure access to new sources of gas (Southern Gas Corridor) and improve security of supply. Enabling bi-directional physical capacity on cross-border interconnections (with Turkey) would not only enhance the flexibility of Bulgaria's gas infrastructure in coping with disruption of the single largest gas infrastructure (N-1) but also provide new pricing points and increased gas price competition. Expanding underground storage and interconnection capacity would also help to reduce exposure to supply disruptions. So far, the preparation and construction of infrastructure has been too slow, and investment continues to be hindered by inappropriate regulation.

There is wide scope for competition in the electricity and gas sectors. The current public provider system, with pre-defined quota obligations, and electricity supply agreements with territorial restrictions on the 'free' segment of the market, entrenches market domination. A market-based approach would enable electricity generators and suppliers to choose their contracting parties freely and thus boost competition. Areas of particular concern for improving the functioning of the energy markets remain the lack of electricity and gas exchanges, and the absence of intraday and balancing markets, effective third-party access to gas pipelines and virtual reverse flows. Bulgaria needs to safeguard the full independence of the National Regulatory Authority on the basis of the third energy package and ensure that transmission system operators are certified as soon as possible. The regulator is still not provided with the necessary means to fulfil its tasks and responsibilities as defined in the third energy package. The gradual phasing-out of regulated prices for electricity and natural gas should be accompanied by effective support for vulnerable energy consumers and measures to empower consumers and help them find the best offers, while taking into account universal service obligations. There are still regulatory obstacles to changing one's energy supplier and switching could be proactively supported through transparency measures. Limited competition and obstacles to switching are reflected in poor consumer assessment of the

¹⁹ In comparison with other EU Member States, expressed in purchasing power standards (PPS).

electricity and gas markets, with low scores on the choice of providers available in both markets and on the ease of switching providers.²⁰

While the two main options for reducing the high energy and carbon intensity of the economy are a reduction in the energy consumption and a substitution of fossil fuels with renewable sources of energy, progress is insufficient in both respects. Bulgaria is the most energy- and carbon-intensive economy in the EU and has one of the highest energy trade deficits. As regards improving energy efficiency, the authorities proposed a mix of policy measures in the second National Energy Efficiency Action Plan (NEEAP, 2011). For public buildings and industrial sites, the NEEAP provides for a combination of financing options, energy-saving obligations, mandatory audits and management measures. Many of these measures have already been adopted but proper enforcement is required. Energy efficiency is also seen as part of a long-term solution to high energy bills, which have recently sparked widespread public discontent. Public funding for energy efficiency projects in housing estates is held back by unclear institutional responsibilities for the maintenance of multi-family residential buildings and the functioning of house-owners' associations. An improved policy framework and greater use of Cohesion Funds could promote innovative financing schemes and thereby increase the efficiency of buildings, district heating and the cogeneration fleet. On renewables, the current policy measures are insufficient to reach Bulgaria's renewable energy target for 2020. In addition, the authorities have recently set temporary grid access tariffs exclusively for renewable energy producers, with a negative impact on the renewables sector.

Measures to ensure an efficient environmental infrastructure have been insufficient so far. Substantial leakages from water distribution networks persist, together with deficient urban waste-water infrastructure and significant pollution from agriculture. Insufficient investment, in particular very low absorption of EU funds, as well as inadequate cost recovery of water services and little progress in reforming the water supply and sewage sectors are barriers to improving water efficiency. A revised National Plan for Management of sludge from urban waste-water treatment plants is due for adoption in 2013. Bulgaria has taken action to improve waste management, *inter alia* with the adoption of a new Law on Waste Management in 2012. Moving away from landfilling to the recycling of waste could give a major boost to jobs and growth, while contributing to reductions in greenhouse gas emissions. However, the 2020 recycling targets are unlikely to be met without further significant efforts. A landfill tax on municipal waste, introduced in 2011, is still too low to provide a strong incentive to move towards more prevention and recycling. The absorption of EU funds in support of a sustainable waste management infrastructure remains sub-optimal, as do inspections and enforcement, while the potential of extended producer responsibility schemes and pay-as-you-throw schemes is largely untapped.

Despite an acknowledgement of the high energy intensity, particularly in the transport sector, a strategic approach to promote more sustainable means of transport, sustainable biofuels, modernisation of the vehicle fleet and widespread application of the recently transposed Directive 2009/33/EC are lacking in Bulgaria. This might hinder the market uptake of clean and energy-efficient vehicles, mainly in urban areas where energy consumption, greenhouse

²⁰ 8th Consumer Markets Scoreboard, December 2012, European Commission, DG SANCO, http://ec.europa.eu/consumers/consumer_research/editions/cms8_en.htm.

gas emissions and pollutant emissions are a major concern. No specific efforts are reported that would translate climate and energy policies into sustained economic development, job creation and social inclusion.

Transport and broadband infrastructure

Available EU funds to co-finance the construction of transport and waterway projects, and provide technical assistance, have not been used to their full potential. Efficient and well-maintained transport networks help ensure improved access to the EU single market, enhance growth and competitiveness and attract foreign investment. Currently, administrative capacity remains insufficient to properly manage and maintain the road, rail and waterway infrastructure. Bulgaria's poor performance in the transport sector also stems from the modal shift from rail to road transport, poor energy efficiency and the high average age of the transport fleet. Both national and trans-European network (TEN) transport infrastructure is still characterised by bad connections and insufficient rehabilitation and maintenance. Also, the inland navigation infrastructure requires upgrading to make navigability on the Danube more reliable. In the case of the railways, the last two decades have seen a serious decline in performance and loss of market share for both freight and passenger transport. The rail passenger services need to be better aligned with demand and infrastructure charges should be set and paid on a non-discriminatory basis. Administrative capacity in key transport sectors and regulatory authorities is too weak to make public services sufficiently effective.

Bulgaria is still facing a digital divide in terms of broadband infrastructure. In rural areas, broadband coverage is well below the EU average. Overall, the level of fixed broadband take-up is still one of the lowest in the EU. The situation has not improved over the past year and is still hampered by insufficient technical capacity for planning and implementing ICT investments as well as administrative obstacles that hinder investment. Bulgaria has still not released the 800 MHz band for wireless broadband. A shortage of ICT skills and literacy holds back efficiency. The share of population with advanced ICT skills is below the EU average, while the percentages of citizens with no or low computer skills are among the highest in the EU.

3.5. Modernisation of public administration

Efforts to modernise the public administration have continued, although their impact on overall effectiveness is rather limited. No steps have been undertaken to advance decentralisation and strengthen the role of the administration and efficiency at local level. The legislative framework for performance-based remuneration for civil servants was put in place, but inconsistencies in human resources management at central level have not been resolved. Clear career development paths for public servants are lacking. However, a draft strategy on developing the administrative system over 2013-20 period has been elaborated, aimed at addressing policy-making, performance-based management, accountability, quality of services and administrative burden.

The use of EU funds is still hampered by unnecessary bureaucracy and a poor understanding of sound financial management. As of January 2013, overall absorption of Bulgaria's European Regional Development Fund, ESF and Cohesion Fund budgets for 2007-13 stood at just 26.7%, with only three more years available to spend the remaining funds. Efforts should be stepped up to mobilise the available EU funds, including in support of the

modernisation and effective delivery of employment, social and environmental policies. Municipalities have had no serious planning role in the structural and cohesion funds system and their capacity as beneficiaries remains insufficient. The large number of appeals against outcomes of public tender procedures related to these funds, which in the majority of cases turn out to be unjustified, has negatively affected their implementation. However, this trend has to be assessed against the right of effective judicial protection, which needs to be preserved. The main problem to be tackled in this area is weak administrative capacity, which slows down the progress of the administrative and the judicial assessment of the appeals.

The development of e-government services is characterised by multiple projects with little coordination between them and no overall strategic approach. A small number of e-services have been upgraded to the interaction stage and only in sporadic cases is electronic case management complete.²¹ Encouraging results are expected from the ESF co-funded projects of the Bulgarian Customs Agency and the National Revenue Agency.

Progress on public procurement is not yet sufficient to ensure the prevention of irregularities to a satisfactory level. New rules entered into effect concerning the *ex-ante* control of: (i) EU co-financed projects, a very relevant part of public investment in Bulgaria; and (ii) contracts awarded on the basis of the negotiated procedure without prior publication. However, the scope of this *ex-ante* control by the Public Procurement Agency is limited to certain aspects of the procedure only, including which contract notices and the methodology for evaluating bids when the award criteria refer to the most economically advantageous tender. The *ex-ante* control should be made more effective by including the prior check of the technical specifications as well as the decisions to apply any of the exclusions provided by the national legislation. In parallel, in the context of the control, the attribution of *ex-officio* powers to an appropriate body should be considered. The scope of the *ex-post* control was reinforced in 2011 with the introduction of planned *ex-officio* powers for the State Financial Inspection Agency, which is in charge of *ex-post* control, including the application of sanctions, together with the National Audit Office. This was supplemented by ad-hoc *ex-post* investigations by the State Financial Inspection Agency. The results include a more effective identification of irregularities and errors, and a more targeted imposition of sanctions. This trend towards a reinforcement of the *ex-post* controls is reflected in the adequate staffing of both the State Financial Inspection Agency and the National Audit Office, in contrast to the limited administrative capacity in the field of public procurement in general. However the real effects of the measures taken need to be confirmed in the coming years. Finally, tools are not yet available to submit tenders electronically. As a result, the significant economic benefits of e-procurement (including greater transparency, faster procedures and more competition) are not being fully exploited.

Bulgaria has taken a number of steps to improve the quality of justice and the independence of the judicial system. However, there are still deficiencies regarding the independency, efficiency and quality of justice which have a direct bearing on the business climate. The Commission reports more broadly on Bulgaria's progress on judicial reform, the fight against corruption and the fight against organised crime under the

²¹ See also information on Points of Single Contact within the meaning of the Services Directive – section 2.6 ‘Structural measures promoting growth and competitiveness’.

Cooperation and Verification Mechanism. The latest report²² in this context shows, for example, that there were deficiencies regarding an independent judiciary which mirror the results on perceived independence in Bulgaria published in the EU's Justice Scoreboard.²³ Bulgaria does not perform regular evaluations of court activities nor has it defined quality standards. The insufficient monitoring and evaluation of court activities could make it more difficult to improve the functioning of the justice system. On e-justice tools and electronic communications between courts and parties, which can contribute to reducing delays and costs for citizens and businesses by facilitating access to justice, the EU Justice Scoreboard rates Bulgaria below the EU average.

Steps were taken in July 2012 to bring more transparency to elections and appointments to top-level positions in the judiciary. In addition, there are concrete plans to promote the use of information and communication technologies in order to improve the accessibility and efficiency of justice. Such measures have the potential to improve the confidence of business operators in the efficiency and objectivity of civil justice. It is too early, however, to assess in full the effectiveness of these reforms, above all as parts have not been implemented yet.

Stronger efforts are indispensable to tackle corruption, as surveys continue to indicate perceived corruption levels significantly above the EU average.²⁴ Greater transparency and consistency in the awarding of public tenders and in commercially relevant judicial decisions would build confidence, encourage inward investment and improve the efficiency of economic activity.

²² COM (2012) 411.

²³ COM (2013) 160.

²⁴ In the 2012-13 Global Competitiveness Report, Bulgaria ranks 87th on diversion of public funds (22nd among EU Member States) and 76th on irregular payments and bribes (24th among EU countries). See <http://reports.weforum.org/global-competitiveness-report-2012-2013/>.

In the 2011 Eurobarometer, 25 % of Bulgarian respondents said they had been asked or expected to pay a bribe over the previous 12 months (compared with an EU average of 8 %), and 57 % considered that corruption is widespread among officials awarding public tenders (EU average: 47 %). Bulgaria had the highest percentage of respondents in the EU who believe there is corruption in the customs service (77 %) and judiciary (76 %). See http://ec.europa.eu/public_opinion/archives/ebs/ebs_374_en.pdf.

4. OVERVIEW TABLE

2012 commitments	Summary assessment
Country-specific recommendations (CSRs)	
<p>CSR 1: Continue with sound fiscal policies to achieve the MTO by 2012. To this end, implement the budgetary strategy as envisaged, ensuring compliance with the expenditure benchmark, and stand ready to take additional measures in case risks to the budgetary scenario materialise. Strengthen efforts to enhance the quality of public spending, particularly in the education and health sectors and implement a comprehensive tax-compliance strategy to further improve tax revenue and address the shadow economy. Further improve the contents of the medium-term budgetary framework and the quality of the reporting system.</p>	<p>Bulgaria has made substantial progress to address the CSR.</p> <p>Public finances have remained strong in spite of the relatively slow economic recovery and preliminary estimates indicate that the MTO was achieved in 2012. The recently adopted new public finance law further aligns the legislation with the Fiscal Compact and Directive 2011/85/EU on minimum national budgetary requirements. Bulgaria implemented measures to increase tax-compliance and address the shadow economy, but still lacks a comprehensive strategy. Further efforts to put in place a coherent strategy for the health system, including a hospital master plan and more transparent hospital financing, will be needed to enhance the quality of public spending in the health sector.</p>
<p>CSR 2: Take further steps to reduce risks to the sustainability and to improve adequacy of the pension system by making the statutory retirement age the same for men and women with full career contributions. Introduce stricter criteria and controls for the allocation of invalidity pensions.</p>	<p>Bulgaria has made some progress to address the CSR.</p> <p>Steps have been taken in the right direction but further measures are needed to guarantee the adequacy of the pension system, especially by increasing the number of contributors, discouraging early exit and avoiding abuses of the invalidity pension system.</p>
<p>CSR 3: Accelerate the implementation of the national Youth Employment Initiative. Ensure that the minimum thresholds for social security contributions do not discourage declared work. Step up efforts to improve the Public Employment Service's performance. To alleviate poverty, improve the effectiveness of social transfers and the access to quality social services for children and the elderly and implement the National Roma Integration Strategy.</p>	<p>Bulgaria has made limited progress to address the CSR.</p> <p>Comprehensive measures to improve youth employment and fight poverty and social exclusion are lacking. The strategy on reducing poverty is in the early stages of implementation; an assessment is not feasible at this stage. The National Roma Integration Strategy lacks an appropriate budget and an action plan. The government kept the minimum thresholds unchanged in 2013 for those professions where employers and employees could not reach an agreement, but a review of the system has not yet been launched.</p>
<p>CSR 4: Speed up the reform of relevant legal acts on schools and higher education and of accompanying measures by focusing on modernising curricula, improving teacher training, and ensuring effective access to education for disadvantaged groups. Improve the access to finance for start-ups and SMEs, in particular those involved in innovative activities.</p>	<p>Bulgaria has made limited progress to address the CSR.</p> <p>The new Law on Pre-School and School Education has still not been adopted with an indicative timeframe for adoption being the second half of 2013 following the constitution of a new National Assembly. The complete package of modernised curricula for general education has been finalised. There are no longer plans to further amend the Law on Higher Education. ESF-funded projects on teacher training and ensuring effective access for</p>

	<p>disadvantaged people are ongoing.</p> <p>Investments in seed capital and support for early start-up and innovative companies remain very low and there is a risk of losing EU funds already in 2013. Joint European resources for Micro to Medium Enterprises (JEREMIE) is operational but actual disbursements are lagging behind.</p>
<p>CSR 5: Step up efforts to enhance administrative capacity and reforms by reducing red tape and the cost of tax compliance and collection, and further improving the absorption of EU funds, in particular in road and rail transport and water management. Improve the quality and independence of the judicial system and speed up the introduction of e- government. Strengthen public administrative capacity in key transport sectors and regulatory authorities.</p>	<p>Bulgaria has made some progress to address the CSR.</p> <p>Measures to reduce red tape and the cost of tax compliance are steps in the right direction; however, their impact on businesses remains to be seen. Lack of expertise and coordination between relevant entities, and a lack of appropriate broadband infrastructure threaten the implementation of e-government. More efforts are needed to strengthen capacity in the rail and road sector. The use of EU structural funds remains low (30%) despite progress over recent years. The key to achieving progress on judicial reform is to deliver on the recommendations under the Cooperation and Verification Mechanism.</p>
<p>CSR 6: Ensure sound implementation of public procurement legislation. Strengthen the prevention of irregularities and effectively apply the sanctions under the Public Procurement Law and those of the Law on Conflict of Interest.</p>	<p>Bulgaria has made some progress to address the CSR.</p> <p>The new rules for ex-post control contributed to increasing the effectiveness of controls and the number of the sanctions applied. This trend needs to be confirmed.</p> <p>Although new rules on ex ante control of EU-financed projects have been put forward by the authorities, further strengthening of these preventive measures is needed. Delays in the treatment of appeals related to public procurement for reasons linked to the limited administrative and judicial capacity considerably affect the implementation of Structural and Investment Funds.</p>
<p>CSR 7: Take measures to remove market barriers, guaranteed profit arrangements and price controls. Ensure the independence of transmission and distribution system operators; complete the market design in particular for the energy exchanges and balancing markets. Improve electricity and gas connections, boost energy efficiency and enhance the capacity to cope with disruptions.</p>	<p>Bulgaria has made limited progress to address the CSR.</p> <p>The independence of the energy regulator was put in doubt by recent developments. The new Energy Law sets out rules for unbundling in the energy sector, but transmission system operators have not yet been certified. Progress on market design, retail markets, energy exchange and balancing markets remains very limited and there is partial progress on energy efficiency, and electricity and gas connections.</p>
<p>Europe 2020 (national targets and progress)</p>	
<p>Employment rate target (in %) as set in the 2011 NRP: 76 %</p>	<p>Employment rate (%) 2011: 63.9%. No progress has been made towards achieving the target. To reach the target, the yearly employment growth rate would have to be at least 0.1%, which is a less positive scenario than the government's expectations.</p>
<p>R&D target (in %) as set in the 2011 NRP: 1.5 % of GDP</p>	<p>Gross domestic expenditure on R&D (in % of GDP) 2011: 0.6 %</p>

	Progress is not on track and the target is out of reach as R&D intensity would have to be stepped up significantly.
Greenhouse gas (GHG) emissions target: +20% (compared to 2005 emissions, ETS emissions are not covered by this national target)	Change in greenhouse gas emissions between 2005 and 2011: +6%. According to the latest national projections submitted to the Commission and taking into account existing measures, it is expected that the target will be reached: +12% in 2020 as compared with 2005 (with a margin of 8 pps).
Renewable energy target: 16% Share of renewable energy in the transport sector: 10%	Share of total renewable energy in gross final energy consumption was 4.1 % in 2011 and 0.3 % in the transport sector. (Source: Eurostat's estimate. April 2013. For 2011, only formally reported biofuels compliant with Art. 17 and 18 of Directive 2009/28/EC are included).
Indicative national energy efficiency target for 2020: increase of energy efficiency with 25% until 2020 (leading to 5 Mtoe primary energy savings in 2020) and decreasing the energy intensity by 50% until 2020 compared to 2005 levels.	Bulgaria has set an indicative national energy efficiency target in accordance with Articles 3 and 24 of the Energy Efficiency Directive (2012/27/EU). However, it has neither expressed it, as required, in terms of an absolute level of primary and final energy consumption in 2020, nor has provided information on the basis on which data this has been calculated.
Early school leaving target (in %): 11%	Early leavers from education and training (percentage of the population aged 18-24 with at most lower secondary education and not in further education or training) 2012: 12.5%. Bulgaria is slightly outperforming the EU average (12.8%). It has shown a steady improvement since 2006 (17.3%), however Bulgaria has taken a step back from 2011 (11.8%).
Tertiary education target (in %): 36%	Tertiary educational attainment 2012: 26.9%. Bulgaria is lagging behind the EU average (34.6%) with minimal progress being registered since 2006 (25.3%) towards the national 2020 target. When compared to 2011 (27.3%), Bulgaria has taken a step back.
Target on the reduction of population at risk of poverty in number of persons: Decrease by 260 000 (baseline 1 630 000)	People at risk of poverty or social exclusion in 1 000 persons (2011): 3 693. The target does not appear to be very ambitious but limited progress has been made towards achieving it.

5. ANNEX

Table I Macroeconomic indicators

	1995-1999	2000-2004	2005-2009	2010	2011	2012	2013	2014
Core indicators								
GDP growth rate	-0.2	5.4	4.0	0.4	1.8	0.8	0.9	1.7
Output gap ¹	-4.0	0.9	3.0	-2.9	-1.3	-1.3	-1.6	-1.4
HICP (annual % change)	10.6	6.4	7.1	3.0	3.4	2.4	2.0	2.6
Domestic demand (annual % change) ²	1.8	7.6	4.6	-4.8	0.0	3.5	2.0	2.7
Unemployment rate (% of labour force) ³	13.3	16.0	7.7	10.3	11.3	12.3	12.5	12.4
Gross fixed capital formation (% of GDP)	14.0	18.3	28.9	22.8	21.5	21.4	21.8	22.1
Gross national saving (% of GDP)	14.5	15.3	14.8	22.5	22.0	22.8	21.7	20.8
General Government (% of GDP)								
Net lending (+) or net borrowing (-)	-3.4	0.2	0.3	-3.1	-2.0	-0.8	-1.3	-1.3
Gross debt	87.9	54.4	18.9	16.2	16.3	18.5	17.9	20.3
Net financial assets	n.a	7.1	7.3	2.7	1.3	n.a	n.a	n.a
Total revenue	38.0	40.0	38.4	34.3	33.6	34.9	36.2	36.9
Total expenditure	41.4	39.8	38.1	37.4	35.6	35.7	37.5	38.2
<i>of which: Interest</i>	10.2	3.0	1.2	0.7	0.7	0.9	0.9	0.9
Corporations (% of GDP)								
Net lending (+) or net borrowing (-)	2.9	3.7	-5.7	7.8	n.a	n.a	n.a	n.a
Net financial assets; non-financial corporations	n.a	-69.0	-161.3	-192.3	-185.0	n.a	n.a	n.a
Net financial assets; financial corporations	n.a	0.1	-16.5	14.8	16.4	n.a	n.a	n.a
Gross capital formation	9.8	9.7	25.7	17.1	n.a	n.a	n.a	n.a
Gross operating surplus	24.1	18.0	30.4	32.2	n.a	n.a	n.a	n.a
Households and NPISH (% of GDP)								
Net lending (+) or net borrowing (-)	-4.4	-7.3	-11.4	-5.4	n.a	n.a	n.a	n.a
Net financial assets	n.a	49.6	62.1	65.8	74.7	n.a	n.a	n.a
Gross wages and salaries	27.8	16.1	31.5	31.6	n.a	n.a	n.a	n.a
Net property income	6.9	0.2	0.3	0.1	n.a	n.a	n.a	n.a
Current transfers received	12.1	9.5	13.5	15.3	n.a	n.a	n.a	n.a
Gross saving	-2.4	-6.8	-9.4	-2.2	n.a	n.a	n.a	n.a
Rest of the world (% of GDP)								
Net lending (+) or net borrowing (-)	-0.7	-4.8	-16.9	0.3	1.3	0.2	-1.1	-1.9
Net financial assets	n.a	14.7	111.3	114.8	98.6	n.a	n.a	n.a
Net exports of goods and services	1.3	-8.9	-16.3	-1.9	0.0	-3.7	-5.1	-6.3
Net primary income from the rest of the world	-2.9	0.6	-3.4	-2.0	-3.4	-2.3	-2.2	-2.1
Net capital transactions	0.0	0.2	0.4	0.7	1.2	1.3	1.5	1.7
Tradable sector	54.7	51.6	47.1	46.4	48.2	48.4	n.a	n.a
Non tradable sector	34.1	35.6	37.3	39.7	38.4	37.5	n.a	n.a
<i>of which: Building and construction sector</i>	4.0	4.4	6.7	6.2	5.6	5.1	n.a	n.a
Real effective exchange rate (index, 2000=100)	3.0	93.1	112.8	137.1	142.3	138.1	139.3	141.8
Terms of trade goods and services (index, 2000=100)	91.1	98.7	103.6	108.1	108.2	106.7	106.3	106.2
Market performance of exports (index, 2000=100)	139.2	118.1	130.7	149.9	161.5	165.2	168.8	169.2
Notes:								
¹ The output gap constitutes the gap between the actual and potential gross domestic product at 2005 market prices.								
² The indicator on domestic demand includes stocks.								
³ Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed. The unemployment rate covers the age group 15-74.								
Source:								
Commission services' 2013 spring forecasts (COM); Convergence programme (CP).								

Table II. Comparison of macroeconomic developments and forecasts

	2012		2013		2014		2015	2016
	COM	CP	COM	CP	COM	CP	CP	CP
Real GDP (% change)	0.8	0.8	0.9	1.0	1.7	1.8	2.9	3.4
Private consumption (% change)	2.6	2.6	1.4	1.7	2.5	2.7	3.9	4.4
Gross fixed capital formation (% change)	0.8	0.8	3.0	0.9	3.1	2.4	5.4	6.1
Exports of goods and services (% change)	-0.4	-0.4	2.8	2.0	4.5	3.9	4.0	4.1
Imports of goods and services (% change)	3.7	3.7	4.3	2.6	5.8	4.4	5.1	5.3
<i>Contributions to real GDP growth:</i>								
- Final domestic demand	1.6	1.6	2.1	1.4	2.8	2.3	3.8	4.4
- Change in inventories	1.9	1.9	0.0	0.1	0.0	0.0	0.1	0.1
- Net exports	-2.7	-2.7	-1.2	-0.5	-1.2	-0.6	-0.9	-1.1
Output gap ¹	-1.3	-1.8	-1.6	-1.8	-1.4	-1.6	-0.9	-0.1
Employment (% change)	-4.3	-4.3	-2.1	-2.4	0.2	0.4	0.7	1.1
Unemployment rate (%)	12.3	n.a.	12.5	13.0	12.4	12.8	12.4	11.8
Labour productivity (% change)	5.4	5.4	3.1	3.5	1.5	1.4	2.2	2.3
HICP inflation (%)	2.4	2.4	2.0	1.8	2.6	2.7	2.6	2.6
GDP deflator (% change)	2.2	2.2	2.2	2.0	2.6	2.4	2.2	2.2
Comp. of employees (per head, % change)	5.6	5.6	4.4	4.7	4.8	5.0	5.3	5.6
Net lending/borrowing vis-à-vis the rest of the world (% of GDP)	0.2	0.0	-1.1	0.3	-1.9	-1.5	-1.6	-2.1
<u>Note:</u>								
¹ In percent of potential GDP, with potential GDP growth recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.								
<u>Source:</u>								
Commission services' 2013 spring forecasts (COM); Convergence programme (CP).								

Table III. Composition of the budgetary adjustment

(% of GDP)	2012	2013		2014		2015	2016	Change: 2012- 2016
	COM	COM	CP	COMI	CP	CP	CP	CP
Revenue	34.9	36.2	37.2	36.9	36.5	36.5	35.5	0.6
<i>of which:</i>								
- Taxes on production and imports	15.1	15.5	15.6	15.9	15.9	15.9	16.1	1.0
- Current taxes on income, wealth, etc.	5.0	5.1	5.3	5.1	5.3	5.3	5.3	0.3
- Social contributions	7.2	7.6	7.6	7.6	7.4	7.3	7.1	-0.1
- Other (residual)	7.6	8.0	8.7	8.2	7.9	8.0	7.0	-0.6
Expenditure	35.7	37.5	38.5	38.2	37.8	37.5	36.3	0.6
<i>of which:</i>								
- Primary expenditure	34.9	36.6	37.4	37.3	37.0	36.7	35.5	0.6
<i>of which:</i>								
Compensation of employees	8.9	8.9	9.0	8.9	8.7	8.7	8.3	-0.6
Intermediate consumption	5.8	6.1	6.2	6.4	6.0	5.8	5.5	-0.3
Social payments	13.5	13.9	14.2	13.8	14.1	13.7	13.2	-0.3
Subsidies	0.9	0.8	0.9	0.8	0.9	0.8	0.8	-0.1
Gross fixed capital formation	3.3	4.1	5.5	4.5	5.5	5.8	5.9	2.6
Other (residual)	2.6	2.8	1.7	2.9	1.9	1.8	1.8	-0.8
- Interest expenditure	0.9	0.9	1.1	0.9	0.8	0.8	0.8	-0.1
General government balance (GGB)	-0.8	-1.3	-1.3	-1.3	-1.3	-1.0	-0.8	0.0
Primary balance	0.1	-0.4	-0.3	-0.4	-0.5	-0.3	0.0	-0.1
One-off and other temporary measures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GGB excl. one-offs	-0.8	-1.3	-1.3	-1.3	-1.3	-1.0	-0.8	0.0
Output gap ²	-1.3	-1.6	-1.8	-1.4	-1.6	-0.9	-0.1	1.3
Cyclically-adjusted balance ²	-0.4	-0.8	-0.7	-0.9	-0.8	-0.7	-0.8	-0.4
Structural balance (SB)³	-0.4	-0.8	-0.7	-0.9	-0.8	-0.7	-0.8	-0.4
<i>Change in SB</i>	<i>1.2</i>	<i>-0.5</i>	<i>-0.3</i>	<i>-0.1</i>	<i>-0.1</i>	<i>0.1</i>	<i>-0.1</i>	-
<i>Two year average change in SB</i>	<i>0.9</i>	<i>0.4</i>	<i>0.4</i>	<i>-0.3</i>	<i>-0.2</i>	<i>0.0</i>	<i>0.0</i>	-
Structural primary balance ³	0.5	0.1	0.4	0.1	0.0	0.1	0.0	-0.5
<i>Change in structural primary balance</i>		<i>-0.4</i>	<i>-0.1</i>	<i>0.0</i>	<i>-0.4</i>	<i>0.1</i>	<i>-0.1</i>	-
Expenditure benchmark								
Applicable reference rate ⁴	1.14	2.56	2.56	0.73	2.11	0.73	2.11	-
Deviation ⁵ (% GDP)	-1.5	-0.1	-0.2	0.7	0.2	0.0	0.7	-
Two-year average deviation (% GDP)	-1.8	-0.8	-0.9	0.3	0.0	0.1	0.4	-
Notes:								
¹ On a no-policy-change basis.								
² Output gap (in % of potential GDP) and cyclically-adjusted balance according to the programme as recalculated by Commission services on the basis of the programme scenario using the commonly agreed methodology.								
³ Structural (primary) balance = cyclically-adjusted (primary) balance excluding one-off and other temporary measures.								
⁴ Reference medium-term rate of potential GDP growth. The (standard) reference rate applies from year t+1, if the country has reached its MTO in year t. A lower rate applies as long as the country is adjusting towards its MTO, including in year t. The reference rates applicable								
⁵ Deviation of the growth rate of public expenditure net of discretionary revenue measures and revenue increases mandated by law from the								
<i>Source:</i>								
Convergence programme (CP); Commission services' 2013 spring forecasts (COM); Commission services' calculations.								

Table IV. Debt dynamics

(% of GDP)	Average 2007-2011	2012	2013		2014		2015	2016
			COM	CP	COM	CP	CP	CP
Gross debt ratio¹	15.6	18.5	17.9	17.9	20.3	20.4	18.6	19.9
Change in the ratio	-1.1	2.2	-0.7	-0.6	2.4	2.5	-1.8	1.3
<i>Contributions²:</i>								
1. Primary balance	0.5	-0.1	0.4	0.3	0.4	0.5	0.3	0.0
2. "Snow-ball" effect	-0.4	0.4	0.4	0.5	0.2	0.1	-0.3	-0.2
<i>Of which:</i>								
Interest expenditure	0.9	0.9	0.9	1.0	0.9	0.8	0.7	0.8
Growth effect	-0.3	-0.1	-0.2	-0.2	-0.3	-0.3	-0.6	-0.6
Inflation effect	-0.9	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
3. Stock-flow adjustment	-1.1	1.9	-1.5	-1.4	1.8	1.9	-1.8	1.5
<i>Of which:</i>								
Cash/accruals diff.								
Acc. financial assets				-1.6		1.9	-2.4	0.4
<i>Privatisation</i>				0.2		0.2	0.0	0.0
Val. effect & residual				0.1		0.1	0.1	0.1
			2013		2014		2015	2016
	2012		COM/ CP ³	CP ⁴	COM/ CP ³	CP ⁴	CP	CP
Gap to the debt benchmark^{5,6}	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Structural adjustment⁷	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
<i>To be compared to:</i>								
Required adjustment⁸	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Notes:								
¹ End of period.								
² The snow-ball effect captures the impact of interest expenditure on accumulated debt, as well as the impact of real GDP growth and inflation on the debt ratio (through the denominator). The stock-flow adjustment includes differences in cash and accrual accounting, accumulation of financial assets and valuation and other residual effects.								
³ Assessment of the consolidation path set in CP assuming growth follows the COM forecasts.								
⁴ Assessment of the consolidation path set in the CP assuming growth follows the CP projections.								
⁵ Not relevant for Member States that were subject to an EDP procedure in November 2011 and for a period of three years following the correction of the excessive deficit.								
⁶ Shows the difference between the debt-to-GDP ratio and the debt benchmark. If positive, projected gross debt-to-GDP ratio does not comply with the debt reduction benchmark.								
⁷ Applicable only during the transition period of three years from the correction of the excessive deficit for EDP that were ongoing in November 2011.								
⁸ Defines the remaining annual structural adjustment over the transition period which ensures that - if followed - Member State will comply with the debt reduction benchmark at the end of the transition period, assuming that COM (SP) budgetary projections for the previous years are achieved.								
Source:								
Convergence programme (CP); Commission services' spring 2013 forecasts (COM); Commission services' calculations.								

Table V Sustainability indicators

	BG		EU27	
	No-policy change scenario	Programme (SCP) scenario	No-policy change scenario	Programme (SCP) scenario
S2	1.1	1.1	3.0	1.3
<i>of which:</i>				
Initial budgetary position (IBP)	0.7	0.3	0.8	-0.9
Long-term cost of ageing (CoA)	0.3	0.9	2.2	2.2
<i>of which:</i>				
Pensions	-0.4	0.2	1.0	1.1
Health care	0.4	0.3	0.9	0.8
Long-term care	0.2	0.2	0.6	0.6
Others	0.2	0.2	-0.4	-0.3
S1 (required adjustment)*	-2.9	-3.3	2.2	0.5
<i>of which:</i>				
Initial budgetary position (IBP)	-0.1	0.0	0.0	-1.8
Debt requirement (DR)	-2.2	-2.6	1.9	1.9
Long-term cost of ageing (CoA)	-0.7	-0.7	0.3	0.4
S0 (risk for fiscal stress)**	0.30		:	
Debt, % of GDP (2012)	18.5		87.0	
Age-related expenditure, % of GDP (2012)	17.6		25.8	
Note:				
The 'No-policy change' scenario depicts the sustainability gap under the assumption that the budgetary position evolves according to the Commissions' spring 2013 forecast until 2014. The 'Programme (SCP)' scenario depicts the sustainability gap under the assumption that the budgetary plans in the programme are fully implemented.				
* The required adjustment of the primary balance until 2020 to reach a public debt of 60% of GDP by 2030.				
** The critical threshold for the S0 indicator is 0.44.				
Source:				
Commission services; 2013 stability programme.				

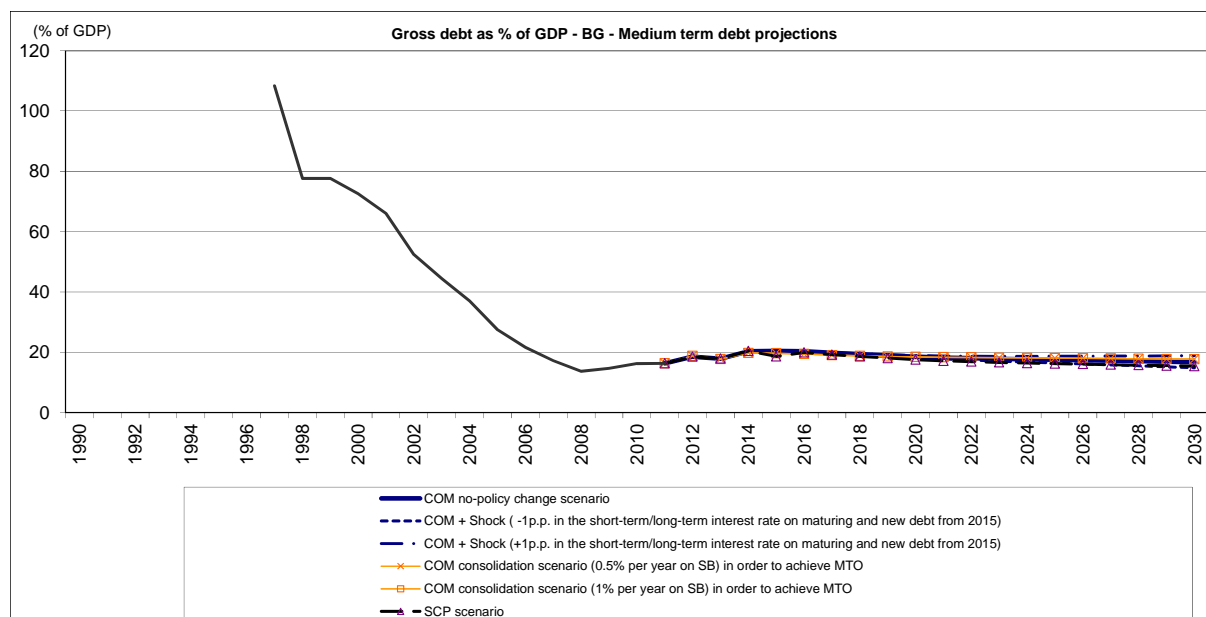


Table VI. Taxation indicators

	2002	2006	2008	2009	2010	2011
Total tax revenues (incl. actual compulsory social contributions, % of GDP)	28.5	30.7	32.3	29.0	27.5	27.2
Breakdown by economic function (% of GDP) ¹						
Consumption	11.9	16.6	17.2	14.7	14.4	14.1
of which:						
- VAT	7.3	10.7	10.9	9.0	9.2	8.7
- excise duties on tobacco and alcohol	1.6	2.2	2.8	2.8	2.5	2.6
- energy	2.1	2.5	3.0	2.7	2.6	2.6
- other (residual)	0.9	1.1	0.4	0.3	0.2	0.3
Labour employed	11.9	10.0	9.7	9.7	9.0	9.1
Labour non-employed	0.0	0.1	0.1	0.1	0.1	0.1
Capital and business income	4.2	3.2	4.3	3.7	3.2	3.1
Stocks of capital/wealth	0.5	0.8	1.0	0.8	0.8	0.8
<i>p.m.</i> Environmental taxes ²	2.3	2.9	3.4	3.0	2.9	2.9
VAT efficiency ³						
Actual VAT revenues as % of theoretical revenues at standard rate	45.1	71.6	75.6	64.1	67.5	64.5
Note:						
1 Tax revenues are broken down by economic function, i.e. according to whether taxes are raised on consumption, labour or capital. See European Commission (2013) Taxation trends in the European Union, for a more detailed explanation.						
2 This category comprises taxes on energy, transport and pollution and resources included in taxes on consumption and capital.						
3 The VAT efficiency is measured via the VAT revenue ratio. The VAT revenue ratio is defined as the ratio between the actual VAT revenue collected and the revenue that would theoretically be raised if VAT was applied at the standard rate to all final consumption. A low ratio can indicate a reduction of the tax base due to large exemptions or the application of reduced rates to a wide range of goods and services ('policy gap') or a failure to collect all tax due to e.g. fraud ('collection gap'). See European Commission (2012), Tax reforms in EU Member States, European Economy 6/2012 and Taxation Papers 34/2012 for a more detailed explanation.						
<i>Source: Commission</i>						

Table VII. Financial market indicators

	2008	2009	2010	2011	2012
Total assets of the banking sector (% of GDP)	103.9	108.8	111.2	109.7	114.6
Share of assets of the five largest banks (% of total assets)	57.3	58.3	55.2	52.6	...
Foreign ownership of banking system (% of total assets)	83.4	83.7
Financial soundness indicators:					
- non-performing loans (% of total loans) ^{1),2)}	2.5	6.4	11.9	14.9	16.9
- capital adequacy ratio (%) ¹⁾	14.9	17.0	17.5	17.5	16.7
- return on equity (%) ^{1),3)}	23.1	10.2	7.9	7.1	7.9
Bank loans to the private sector (year-on-year % change)	32.4	4.1	1.6	3.8	3.5
Lending for house purchase (year-on-year % change)	38.1	8.6	3.7	1.3	1.0
Loan to deposit ratio	128.1	126.7	119.5	107.5	102.6
CB liquidity as % of liabilities	0.0	0.0	0.0	0.0	0.0
Banks' exposure to countries receiving official financial assistance (% of GDP)
Private debt (% of GDP)	72.6	76.2	74.6	71.9	...
Gross external debt (% of GDP) ⁴⁾					
- Public	7.1	8.1	7.9	7.2	8.7
- Private	72.1	76.6	75.4	71.0	70.9
Long term interest rates spread versus Bund (basis points)*	1.4	4.0	3.3	2.7	3.0
Credit default swap spreads for sovereign securities (5-year)*	498.6	353.1	259.0	276.0	253.8
Notes:					
¹⁾ Latest data (June 2012).					
²⁾ Figures from 2008 onwards include foreign bank branches; Excludes loans to credit institutions.					
³⁾ After extraordinary items and taxes. Tier 1 capital.					
⁴⁾ Latest data 2012Q3.					
* Measured in basis points.					
Source:					
Bank for International Settlements and Eurostat (exposure to macro-financially vulnerable countries), IMF (financial soundness indicators), Commission (long-term interest rates), World Bank (gross external debt) and ECB (all other indicators).					

Table VIII. Labour market and social indicators

Labour market indicators	2007	2008	2009	2010	2011	2012
Employment rate (% of population aged 20-64)	68.4	70.7	68.8	65.4	62.9	63.0
Employment growth (% change from previous year)	3.2	2.6	-2.6	-4.7	-3.4	-4.4
Employment rate of women (% of female population aged 20-64)	63.5	65.4	64.0	61.7	59.8	60.2
Employment rate of men (% of male population aged 20-64)	73.4	76.1	73.8	69.1	66.0	65.8
Employment rate of older workers (% of population aged 55-64)	42.6	46.0	46.1	43.5	44.6	45.8
Part-time employment (% of total employment, 15 years and more)	1.7	2.3	2.3	2.4	2.4	2.4
Part-time employment of women (% of women employment, 15 years and more)	2.1	2.7	2.7	2.6	2.6	2.7
Part-time employment of men (% of men employment, 15 years and more)	1.3	2.0	2.0	2.2	2.1	2.2
Fixed term employment (% of employees with a fixed term contract, 15 years and more)	5.2	5.0	4.7	4.5	4.1	4.5
Transitions from temporary to permanent employment	:	3.1	0.8	0.6	1.4	:
Unemployment rate ¹ (% of labour force, age group 15-74)	6.9	5.6	6.8	10.3	11.3	12.3
Long-term unemployment rate ² (% of labour force)	4.1	2.9	3.0	4.8	6.3	6.8
Youth unemployment rate (% of youth labour force aged 15-24)	14.1	11.9	15.1	21.8	25.0	28.2
Youth NEET rate (% of population aged 15-24)	19.1	17.4	19.5	21.8	21.8	21.5
Early leavers from education and training (% of pop. 18-24 with at most lower sec. educ. and not in further education or training)	14.9	14.8	14.7	13.9	11.8	12.5
Tertiary educational attainment (% of population 30-34 having successfully completed tertiary education)	26.0	27.1	27.9	27.7	27.3	26.9
Formal childcare (from 1 to 29 hours; % over the population less than 3 years)	2.0	2.0	1.0	1.0	0.0	:
Formal childcare (30 hours or over; % over the population less than 3 year)	6.0	9.0	7.0	6.0	7.0	:
Labour productivity per person employed (annual % change)	3.2	3.5	-2.9	5.3	5.4	5.4
Hours worked per person employed (annual % change)	0.0	0.1	-0.1	-0.1	-0.1	0.0
Labour productivity per hour worked (annual % change; constant prices)	3.1	3.4	-2.9	5.4	5.5	5.3
Compensation per employee (annual % change; constant prices)	3.2	7.3	4.9	8.2	3.5	3.3
Nominal unit labour cost growth (annual % change)	9.3	12.5	12.7	5.6	3.0	0.2
Real unit labour cost growth (annual % change)	0.1	3.7	8.1	2.7	-1.8	-2.0
Notes:						
¹ Unemployed persons are all persons who were not employed, had actively sought work and were ready to begin working immediately or within two weeks. The labour force is the total number of people employed and unemployed.						
² Long-term unemployed are unemployed persons for at least 12 months.						
Sources:						
Commission (EU Labour Force Survey and European National Accounts)						

Expenditure on social protection benefits (% of GDP)	2006	2007	2008	2009	2010
Sickness/Health care	3.59	3.70	4.41	3.92	4.25
Invalidity	1.26	1.13	1.15	1.38	1.40
Old age and survivors	7.25	7.04	7.40	8.63	9.04
Family/Children	1.02	1.18	1.30	1.99	2.00
Unemployment	0.30	0.28	0.35	0.53	0.60
Housing and Social exclusion n.e.c.	0.00	0.00	0.00	0.01	0.01
Total	13.77	13.68	14.96	16.67	17.56
of which: means tested benefits	0.84	0.67	0.71	0.74	0.79
Social inclusion indicators	2007	2008	2009	2010	2011
At-risk-of-poverty or social exclusion ¹ (% of total population)	60.7	44.8	46.2	49.2	49.1
At-risk-of-poverty or social exclusion of children (% of people aged 0-17)	60.8	44.2	47.3	49.8	51.8
At-risk-of-poverty or social exclusion of elderly (% of people aged 65+)	71.1	65.5	66.0	63.9	61.1
At-Risk-of-Poverty rate ² (% of total population)	22.0	21.4	21.8	20.7	22.3
Severe Material Deprivation ³ (% of total population)	57.6	41.2	41.9	45.7	43.6
Share of people living in low work intensity households ⁴ (% of people aged 0-59)	15.9	8.1	6.9	7.9	11.0
In-work at-risk-of poverty rate (% of persons employed)	5.8	7.5	7.5	7.7	8.2
Impact of social transfers (excluding pensions) on reducing poverty	13.7	21.0	17.4	23.6	17.7
Poverty thresholds, expressed in national currency at constant prices ⁵	1737	2369	2755	2869	2678
Gross disposable income (households)	30549	37277	41041	41575	:
Relative median poverty risk gap (60% of median equivalised income, age: total)	33.5	27.0	27.4	29.6	30.0
Notes:					
¹ People at-risk-of poverty or social exclusion (AROPE): individuals who are at-risk-of poverty (AROP) and/or suffering from severe material deprivation (SMD) and/or living in household with zero or very low work intensity (LWI).					
² At-risk-of poverty rate (AROP): share of people with an equivalised disposable income below 60% of the national equivalised median income.					
³ Share of people who experience at least 4 out of 9 deprivations: people cannot afford to i) pay their rent or utility bills, ii) keep their home adequately warm, iii) face unexpected expenses, iv) eat meat, fish, or a protein equivalent every second day, v) enjoy a week of holiday away from home once a year, vi) have a car, vii) have a washing machine, viii) have a colour tv, or ix) have a telephone.					
⁴ People living in households with very low work intensity: share of people aged 0-59 living in households where the adults (excluding dependent children) work less than 20% of their total work-time potential during the previous 12 months.					
⁵ For EE, CY, MT, SI, SK, thresholds in nominal values in Euros; HICP - index 100 in 2006 (2007 survey refers to 2006 incomes)					
Sources:					
For expenditure for social protection benefits ESSPROS; for social inclusion EU-SILC.					

Table IX. Product market performance and policy indicators

Performance indicators	2003-2007	2008	2009	2010	2011	2012
Labour productivity ¹ total economy (annual growth in %)	3.5	3.5	-2.9	5.3	5.4	5.4
Labour productivity ¹ in manufacturing (annual growth in %)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Labour productivity ¹ in electricity, gas, steam and air conditioning supply (annual growth in %)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Labour productivity ¹ in the construction sector (annual growth in %)	-4.9	-0.8	9.3	-0.3	12.9	7.6
Total number of patent ² applications per million of labour force	6.2	5.0	4.6	3.6	n.a.	n.a.
Policy indicators	2003-2007	2008	2009	2010	2011	2012
Enforcing contracts ³ (days)	564	564	564	564	564	564
Time to start a business ³ (days)	32	49	18	18	18	18
R&D expenditure (% of GDP)	0.5	0.5	0.5	0.6	0.6	n.a.
Tertiary educational attainment (% of 30-34 years old population)	25.0	27.1	27.9	27.7	27.3	26.6
Total public expenditure on education (% of GDP)	4.13	4.44	4.58	4.10	n.a.	n.a.
	2007	2008	2009	2010	2011	2012
Product market regulation ⁴ , Overall (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Product market regulation ⁴ , Retail (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Product market regulation ⁴ , Network Industries ⁵ (Index; 0=not regulated; 6=most regulated)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Notes:						
¹ Labour productivity is defined as gross value added (in constant prices) divided by the number of persons employed.						
² Total number of patent applications to the European Patent Office (EPO) per million of labour force						
³ The methodologies, including the assumptions, for this indicator are presented in detail on the website http://www.doingbusiness.org/methodology .						
⁴ The methodologies of the product market regulation indicators are presented in detail on the website http://www.oecd.org/document/1/0,3746,en_2649_34323_2367297_1_1_1_1,00.html . The latest available product market regulation indicators refer to 2003 and 2008, except for Network Industries.						
⁵ Aggregate Energy, Transport and Communications Regulation (ETCR).						
*figure for 2007.						
Source :						
Commission, World Bank - <i>Doing Business</i> (for enforcing contracts and time to start a business) and OECD (for the product market regulation indicators).						

Table X. Green Growth

		2002-2006	2007	2008	2009	2010	2011
Green Growth performance							
<i>Macroeconomic</i>							
Energy intensity	kgoe / €	1.14	0.98	0.91	0.84	0.86	0.91
Carbon intensity	kg / €	3.84	3.41	3.11	2.82	2.93	n.a.
Resource intensity (reciprocal of resource productivity)	kg / €	7.08	6.86	6.96	5.89	n.a.	n.a.
Waste intensity	kg / €	n.a.	n.a.	7.60	n.a.	7.99	n.a.
Energy balance of trade	% GDP	0.9%	-7.5%	-8.4%	-5.3%	-6.1%	-6.8%
Energy weight in HICP	%	n.a.	13	14	13	14	12
Difference between change energy price and inflation	%	n.a.	-3.5	-1.3	3.2	-3.7	-0.4
Environmental taxes over labour taxes	ratio	24.5%	32.7%	35.1%	30.6%	32.2%	n.a.
Environmental taxes over total taxes	ratio	9.3%	10.2%	10.5%	10.3%	10.6%	n.a.
<i>Sectoral</i>							
Industry energy intensity	kgoe / €	0.84	0.71	0.62	0.46	0.48	n.a.
Share of energy-intensive industries in the economy	% GDP	13.6	n.a.	n.a.	n.a.	n.a.	n.a.
Electricity prices for medium-sized industrial users**	€/ kWh	n.a.	0.06	0.06	0.06	0.07	0.07
Gas prices for medium-sized industrial users***	€/ kWh	n.a.	0.02	0.02	0.03	0.03	0.03
Public R&D for energy	% GDP	n.a.	0.01%	0.03%	0.01%	0.00%	0.00%
Public R&D for the environment	% GDP	n.a.	0.01%	0.00%	0.00%	0.01%	0.01%
Recycling rate of municipal waste	ratio	0.0%	0.0%	0.0%	0.0%	0.0%	n.a.
Share of GHG emissions covered by ETS*	%	n.a.	57.2%	57.2%	55.4%	55.5%	60.5%
Transport energy intensity	kgoe / €	n.a.	1.19	1.25	1.18	n.a.	n.a.
Transport carbon intensity	kg / €	n.a.	3.26	3.42	3.28	n.a.	n.a.
Security of energy supply							
Energy import dependency	%	n.a.	51.3%	52.1%	45.3%	40.1%	36.6%
Diversification of oil import sources	HHI	n.a.	0.37	0.41	0.39	0.58	n.a.
Diversification of energy mix	HHI	n.a.	0.27	0.27	0.26	0.27	0.29
Share renewable energy in energy mix	%	n.a.	4.7%	4.8%	6.2%	8.1%	7.0%

Country-specific notes:

The year 2012 is not included in the table due to lack of data.

General explanation of the table items:

Source: Eurostat unless indicated otherwise; ECFIN elaborations indicated below

All macro intensity indicators are expressed as a ratio of a physical quantity to GDP (in 2000 prices)

Energy intensity: gross inland energy consumption (in kgoe) divided by GDP (in EUR)

Carbon intensity: Greenhouse gas emissions (in kg CO₂ equivalents) divided by GDP (in EUR)

Resource intensity: Domestic Material Consumption (in kg) divided by GDP (in EUR)

Waste intensity: waste (in kg) divided by GDP (in EUR)

Energy balance of trade: the balance of energy exports and imports, expressed as % of GDP

Energy weight in HICP: the share of the "energy" items in the consumption basket used in the construction of the HICP

Difference between energy price change and inflation: energy component of HICP, and total HICP inflation (annual %-change)

Environmental taxes over labour or total taxes: from DG TAXUD's database "Taxation trends in the European Union"

Industry energy intensity: final energy consumption of industry (in kgoe) divided by gross value added of industry (in 2005 EUR)

Share of energy-intensive industries in the economy: share of gross value added of the energy-intensive industries in GDP

Electricity and gas prices medium industrial users: consumption band 500 - 2000MWh and 10000 - 100000 GJ; figures excl. VAT.

Recycling rate of municipal waste: ratio of municipal waste recycled over total municipal waste

Public R&D for energy or for the environment: government spending on R&D (GBAORD) for these categories as % of GDP

Share of GHG emissions covered by ETS: based on greenhouse gas emissions as reported by Member States to EEA (excl LULUCF)

Transport energy intensity: final energy consumption of transport activity (kgoe) divided by transp industry gross value added (2005 EUR)

Transport carbon intensity: greenhouse gas emissions in transport activity divided by gross value added of the transport sector

Energy import dependency: net energy imports divided by gross inland energy consumption incl. energy consumption international bunkers

Diversification of oil import sources: Herfindahl index (HHI), calculated as the sum of the squared market shares of countries of origin

Diversification of the energy mix: Herfindahl Index over natural gas, total petrol products, nuclear heat, renewable energies and solid fuels

Share renewable energy in energy mix: %-share in gross inland energy consumption, expressed in tonne oil equivalents

*Provisional data (15 April 2013). Commission Services and EEA.

** For 2007 average of S1 & S2 for DE, LU, NL, FI, SE & UK. Other countries only have S2.

*** For 2007 average of S1 & S2 for IT, NL, FI, SE & UK. Other countries only have S2.